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THE JOURNAL

OF THE

Indiana State Medical Association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION
OF INDIANA

Issued Monthly

Under the Direction of the Council

ALBERT E. BULSON, M.D.

Editor and Manager

OFFICE OF PUBLICATION

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VOLUME XXIV JANUARY, 1931 NUMBER 1

ORIGINAL ARTICLES

JOINT SURGERY*

E. B. MUMFORD, M.D.

INDIANAPOLIS

Progress in joint surgery was for many years retarded through two great fears, the fear of the laity that stiffness of the joint would follow the loss of the "joint water" and the fear of the physician that infection would result from any joint operation. To a very large degree these fears have been dispelled and the advance in joint surgery has been tremendous and yet there is much of an educational phase to be done along this line. It can be stated definitely that opening of a joint with the complete loss of all joint fluid present does not in any way contribute to stiffness of that joint and it also can be as definitely stated that opening of a joint does not offer a greater field for subsequent infection than does a similar operation upon any other serous cavity of the body. In fact some investigators feel that the resistance to infection is greater in the joint than in the peritoneal cavity. It is true, however, that should infection occur in a joint that the end result may be most disastrous as to function in that joint and all joint surgery is to be done with the greatest aseptic care.

Joint complaints are most common and often the diagnosis is uncertain and the treatment haphazard. A careful history of the onset and the progress of the symptoms, a painstaking clinical examination with an exact anatomical mental picture of the joint structures, a bacteriological study of the joint fluid and a complete x-ray study are all essential in forming an opinion of the condition present and in outlining the plan of treatment. Not infrequently an exploration of the joint and a study of excised tissues are necessary for an accurate diagnosis. An exploratory arthrotomy has as much justification as an exploratory laparotomy.

The "joint" patient presents himself on account of one or more of three conditions, pain, loss of function and instability. For convenience of systematic study the joint conditions may be divided into five etiological groups, traumatic, infectious, toxic, paralytic and postural. The prognosis in each is different as is also the plan of treatment and the end result desired. In one group full motion is desired while in another complete ankylosis gives the best function.

Traumatic Joints. Sprains, derangement of meniscus (cartilages), dislocations, and fractures are the most common injuries of this group.

In the simple sprain it should be remembered that the ligament does not rupture and lose its continuity but tears away from its attachment to the bone and in so doing often pulls off a small piece of bone. Swelling and pain are the chief symptoms and point tenderness over the injured tendon attachment, and not along the joint line, together with pain on that motion of the joint which puts a strain or pull upon the injured ligament constitute the physical signs. Ecchymosis is uncommon in sprains and practically always present in fractures. The treatment of a simple sprain is that of fixation of the joint so that the injured ligament cannot be stretched. This can be obtained either through the use of plaster of Paris splint or by adhesive strappings. For the first twenty-four hours relief of pain can be given by cold packs. The ligament should be protected until all point tenderness is lost. Heat, light massage are valuable later. A chronic sprain is most difficult to heal.

Early effusion into the joint cavity following trauma is practically always due to hemorrhage. This is true in the severe sprains or twists as well as in dislocations and intra-articular fractures. Blood in a joint undergoes either a lysis and complete absorption or clots with the serum being absorbed. The clots become organized and act as mechanical irritants to the synovia leading later to a true hydrops or excessive joint fluid condition. In some instances the blood clot may pick up a few osteogenetic cells and undergo a true calcification. It is therefore essential that all traumatic joints be aspirated at an early period following the accident. Aspiration of a joint offers no more danger to the patient than does aspiration of the pleural or peritoneal cavities or of the spinal canal. All dislocations and intra-articular fractures are associated with blood into the joint and demand aspiration.

*Presented before the Section on Surgery of the Indiana State Medical Association at the Fort Wayne session, September 25, 1930.

Not infrequently small pieces of cartilages are detached from the articulating surfaces of the bones. These small particles of cartilage become nourished by the joint fluid and grow to form the "joint mice." Caught between the articulating bones they cause pain and an irritation of the synovia and an increase of joint fluid. Such loose bodies as a rule can be shown in the radiogram. Their treatment is removal through an arthrotomy incision. The prognosis is excellent.

The joint minisus, especially the semi-lunar cartilages of the knee, often is fractured or torn loose. They too act as loose bodies and demand removal, an operation which does not lessen the function of the joint.

In cases of intra-articular fracture the question arises as to whether motion in the joint should be early or late. Those who believe in early mobilization think that by such action the callus will be kept worn down and smooth while those who believe in long fixation of the joint feel that less callus is formed. The writer believes that an early mobilization is advisable in all cases of intra-articular joint fractures where such motion does not tend to displace the fragments.

In case of stiffness or ankylosis following traumatic lesions with a poor position for function active and passive motions with heat and massage are first to be tried. If motion cannot be obtained then an arthroplasty or an arthrodesis is indicated, the type of operation being determined by the joint involved and the extent of the pathological condition. Forcible breaking up of intra-articular adhesions does not offer much relief in this problem.

In compound wounds of the joint the wound should be enlarged and the joint washed out thoroughly with some warm mild antiseptic or normal salt solution. The layers of tissue are closed with catgut sutures layer by layer and the skin with silk. No drains are used.

Infected Joints. Infected joints may be divided into two groups, those infected by the pyogenic organisms and those infected by the tubercle organism. The syphilitic joints are no doubt due to central nerve influences rather than to the local action of the spirochete.

Pyogenic infections. This type of infection may be by direct contamination from the outside, compound wounds, or, as more often occurs, through the blood stream. Practically all of the pyogenic organisms may be found, but the gonococcus and the influenza and typhoid are the most common from the blood stream, the staphylococcus albus and aureus being almost entirely from compound wounds. It has been shown experimentally that many of the blood stream joint infections are primarily extra-articular, the joint cavity being involved later and the writer has been able to demonstrate this fact clinically in four operated cases, three of which were gonorrheal in type.

If an infection of a joint is suspected through the cardinal symptoms of heat, tenderness, pain, and swelling, hot applications should be used with the joint in complete fixation. If at the end of forty-eight hours there is not any improvement or the condition has become worse drainage should be given. Under a tourniquet dissection is carefully carried down to the joint capsule at the most tender point. If a small pocket of pus is found free drainage is maintained by means of a vaseline wick. This procedure alone may suffice to clean up the infection and within a few days the wound will fill in. If pus is not encountered then the joint should be aspirated by placing a needle through the exposed capsule. If pus is found within the joint then the capsule is opened wide, the joint flushed out with normal saline or some mild antiseptic solution. The treatment after arthrotomy will vary with the opinion of the operator. Drains may be inserted and the joint flushed out daily, the joint being fixed, or following the teaching of Willems, dry dressings may be placed over the wound, active mobilization begun at once. Cotton advises a small arthrotomy wound followed by copious flushings of normal saline and 1:15000 bichloride of mercury solution and then closure of the capsule and drainage of the subcutaneous tissue. Phemister showed that in pyogenic infections there was considerable erosion at the weight-bearing portions of the cartilage and suggests that traction be used in these conditions. The end result in pyogenic joint infections have been very poor as to return of joint function and many have led to amputations of the extremity and even to death of the patient. The earlier treatment is begun the better the prognosis.

Tuberculosis of the joint is a blood stream infection. The synovia may be infected primarily but as a rule the process begins in the epiphyseal portions of the adjacent bones, the joint becoming involved later through the destruction of the articulating cartilage. Often an early diagnosis of joint tuberculosis is most difficult but to err on the wrong side is never damaging to the patient. Referred or local pain, muscle spasm, loss of function and swelling should always put the physician on guard. The early lesions may show only a slight cloudiness in the x-ray film, as if the latter were a "poor picture." Aspiration of the joint rarely gives any information in the early part of the disease.

The treatment of tuberculosis of the joint will be determined largely by the age of the patient and the joint involved. The cure of tuberculosis is almost entirely through fixation of the joint and the end result is one of some form of ankylosis with a considerable loss of function. In children bony ankylosis is more apt to occur than in adults, operative interference may disturb the growth along the epiphyseal lines but the loss of a long period of time is less an economic problem. Therefore it is the general teaching to be conservative in all types of joint tuberculosis in children. This treatment consists in fixation by means of splints or by rest in bed of the affected

joint, the extremity being maintained in that position which will give the best functional result should the joint eventually become stiff. There is a tendency to fix these joints at a much earlier period by means of bone grafts (fusion operations of the spine, extra-articular bone grafts of the hip and knee) all with the purpose of not only hastening ankylosis but of producing a true bony ankylosis. In adults, on the other hand, fibrous ankylosis usually takes place, operative interference will not disturb growth and a short period of convalescence is of economic importance. Therefore a more radical line of procedure is followed in these older patients. Fusion operations of the spine, extra-articular arthrodesis of the hip, resection of the knee and amputation or arthrodesis of the foot, are the usual types of operation used to obtain a rapid and firm ankylosis. In all plans of treatment however haste makes waste and the patient should be advised to be most careful in returning to full work.

Toxic Joints. In this type of joint we have to consider that great group of arthropathies which are commonly called rheumatism or chronic arthritis. In certain types especially of the knee a removal of the synovial membrane (synovectomy), had been done with fair success. These operative cases however require careful study and selection, the indication being that the disease be localized in one or two joints and that the disease be quiescent.

Paralytic Joints. This type of joint is found most frequently following poliomyelitis. The problem is one of restoring stability with the greatest amount of motion. Pain is not a factor. After many types of operations (silk ligaments, tendon transplants, tendon stays), the solution of the problem of the paralytic joint is being solved almost entirely through some form of arthrodesis. The paralytic shoulder, elbow, wrist, spine (scoliosis) hip and ankle are all greatly improved as to function when the joint is stiffened in a position of election. The most striking example of the radical surgery of joints is that of the stabilization of the ankle joint in which the subastragular, the astraguloscaphoid and the calcaneo-cuboid joints are all opened wide, the articulating cartilage removed, the head and part of the neck of the astragulus excised and the shape of the foot reformed. Through such an extensive operation the end result is a painless stable weight bearing extremity. The excision of the astragulus with a remoulding of the ankle mortice and the backward displacement of the foot (the Whitman astragalectomy) is another example of this field of surgery. Such operations eliminate the use of braces and permit of a greater function of the extremity as a whole. But very few of the paralytic joints cannot be improved as to function by some form of stabilization.

Postural Joints. This group includes those deformities which result from contractures of muscle groups following long fixation in one position. Most of these deformities may be corrected by constant traction over a long period of time. The flexion and outward rotation of the hip may demand a lowering of the anterior spine of the ilium with its attached muscles (Soutter operation), the flexion of the knee is relieved by a posterior capsulorrhaphy and the equinus position of the foot is corrected by a tenotomy of the tendo calcaneus. Many of these postural deformities can be prevented by protective splints while the patient is in bed and during that period in which the contractures occur.

Operations—Arthroplasty. The purpose of this operation is to restore function in a joint which has become stiff. The elbow, hip and knee have all been attacked in this manner with good result in a fair percentage of cases. A few operators, after remoulding the joint, cover the raw surfaces with some form of prepared membrane but most operators use a covering made of the fascia lata. The cases should be selected and care should be taken to see that the disease is entirely quiescent. The gonorrheal joints and those following severe trauma offer the most favorable prognosis.

Arthrodesis. The purpose of this operation is to produce a stiff joint. In many instances experience has shown that better function will be obtained in complete loss of motion than in partial motion. This is especially true in all forms of tuberculosis in paralytic joints and in severe traumas to the ankle joint. Bony ankylosis is obtained by complete removal of the articulating cartilage followed by a long period of fixation with the joint in the position of election. Excellent results are obtained in a very large percentage of such operations. The fusion operations of the spine, (both the Albee and the Hibbs operation) the extra-articular bone graft of the hip, the triple arthrodesis of the ankle, the resection of the knee are all examples of common arthrodesis operations.

In this paper an attempt has been made to show that joint surgery has made great advances in the past years; that such surgery does not offer a greater danger to the life of the patient than does other major operations in other parts of the body; that better function can be given by making this flail joint stiff or that stiff joint mobile, and that such surgery should not be denied the patient through the fear of infection or the fear of the loss of the joint fluid.

THE SYSTEMIC EFFECT OF NASAL HYPERPLASIA AS IT AFFECTS THE NASAL GANGLION*

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The systemic effects of nasal and sinus infections are barely mentioned in most special text books, while on the other hand little space is given

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to diseases of the nose and sinuses in books on internal medicine. However, the nose is one of the important gateways of infection and on the shoulders of those who treat these infections falls a great responsibility of guarding it.

It is not the purpose of this paper to enumerate all of the diseases and go into detail regarding all symptoms produced by these infections. Infections of certain type that are left to their own recourse, do, however, produce a hyperplastic mucosa in the nose and I shall consider its effect on the spheno-palatine ganglion from an anatomical, neurological and clinical standpoint.

To know what effect has been produced it is of course essential that we should use every means at our disposal to examine the nasal cavities and accessory sinuses of the head for any pathological changes that may have taken place, also for any anomalies that may be present. If we are really going to accomplish our aim it is necessary that a most careful history to be taken. How surprising it is sometimes to find that a patient giving a history of upper respiratory infection, followed by a rheumatic joint, neuralgia pain, or gastric disturbance, of many years duration, is relieved when a chronic, hyperplastic, ethmo-sphenoiditis is given appropriate attention. I consider finding pathology of this type in the nose of much diagnostic importance, and have been impressed with the internist's valuation of disease in this region of the nose as an aid to him in establishing a diagnosis. Some are seeking this aid, valuing it as they do the laboratory and mechanical aids at their disposal.

Certain types of nasal mucous membrane inflammation are local, but one that goes on to suppuration does not remain local; at least its presence may be felt in any part of the body, and if we have symptoms referable to some distant organ of the body long after acute nasal infections have subsided we should not forget that there is a nervous system that has to do with the metabolic processes going on in the body, and a part of this nervous system is known as the spheno-palatine (Meckel's-nasal) ganglion. This ganglion is located anatomically in the spheno-palatine fossa which intervenes between the osseous boundaries of the sphenoid and maxillary sinuses and precludes intimate relationship between the two sinuses at this point. Medially, the perpendicular plate of the palate bone and nasal mucous membrane separate the fossa from the nasal cavity. However, the osseous medial wall is different, containing as it does the spheno-palatine foramen. The spheno-palatine fossa with its contained spheno-palatine ganglion is obviously very intimately related to certain of the para-nasal chambers which pneumatize the osseous boundaries. It is, therefore, clear that the spheno-palatine ganglion is continually subjected to the influences of the very intimately related para-nasal sinuses, particularly the sphenoid and ethmoid.

The spheno-palatine ganglion (Meckel's nasal ganglion) is a small triangular reddish-gray body and is a component of the group of sympathetic ganglia found in the head region of the body. It is more or less intimately related topographically with the lateral wall of the nasal fossa, and suspended from the maxillary division of the trigeminal nerve. Its histologic make-up consists of an interlacement of nerve fibers and stellate nerve cell bodies. It has three so-called roots—motor, sensory and sympathetic. They are, however, of a mixed character as regards the physiology of their component nerve fibers.

This ganglion is a part of the autonomic (vegetative) nervous system. The autonomic nervous system may be regarded as the division of the nervous system which includes all nerves lying outside the central nervous system and cerebrospinal ganglion, except those associated with the special sense organs, and the cells through which these outlying neurons are functionally connected with the central nervous system. Certain centers in the brain stem are functionally superimposed on the neurons in the central nervous system. The outlying neurons are aggregated in the autonomic ganglion, and there axons terminate in synaptic relationship to neurons in the outlying ganglia.

The cranial autonomic neurons and ganglia associated with them are:

The cephalic sympathetic plexus
The internal carotid plexus
The cavernous plexus
The tympanic plexus
The external carotid plexus
The cephalic autonomic ganglia
The ciliary ganglion
The spheno-palatine ganglion
The otic ganglion
The sub-maxillary ganglion

The associated ganglia are:

The geniculate ganglion
The petrosal ganglion
The jugular and nodose ganglia of the vagus.

The spheno-palatine ganglion, the one we are considering, receives the preganglionic (motor root) and sympathetic (sympathetic root) fibers; the preganglionic fibers are components of the facial and are conveyed to the nerve of the pterygoid canal by the great superficial petrosal nerve. The sympathetic fibers are divided from the internal carotid plexus and join the nerve of the pterygoid canal through the deep petrosal nerve. Branches of the maxillary nerve join the spheno-palatine ganglion and constitute the sensory roots.

Delic, in 1927, on a basis of clinical findings, advanced the opinion that the spheno-palatine ganglion is not purely autonomic, but in part is of vagus origin. This ganglion is important, in that it is so placed that it is susceptible to insult and injury. For instance, a diseased sinus with its toxines pouring out and bathing the parts in pus. Also a closely allied blood stream carrying

as it may, infectious material. Then there is the piling up of cell structure due to a continued inflammatory process going on, producing hyperplasia. From the very lowest to the highest forms of animal life a nerve network is present, which has for its function the regulation of metabolic activity.

Many of the reflex nasal manifestations are puzzling from an anatomic, physiological viewpoint, and much research work is being done to aid us further in knowing the cause and effect of certain reflex phenomena. Can we say the alterations of the endocrine glands can produce a reflex action which in turn produces a change in the nose, or may the reverse be true?

It has been stated that cardiac rhythm can be affected by nasal disease or adequate stimulation to the mucous membrane of the nose, and that some so-called cases of cardiac neuroses and arrhythymias have been cured by treatment applied to the nasal chonae. It is necessary then to see how this is done.

(1) That different impulses from the nose pass over the trigeminal fibers (somatic sensory neurons) to the terminal trigeminal nucleus; from there by the way of the centrally directed trigeminothalamic tract to the thalamus and from there to the somesthetic area of the cortex or the conscious recognition of such impulses.

I mention this to show that a definite reaction does take place when a stimuli is applied to certain areas in the nose; and I am sure many have been able to relieve unexplainable symptoms and complaints by treatment or surgery applied to certain areas in the nose and its accesory sinuses.

The following case reports will show that definite results have been obtained by the proper attention directed to the nose and accessory sinuses.

Case No. 1. Mr. "B," age forty-two, slender in stature, about fifteen pounds underweight, always had been in good health except for an attack of pleurisy at age of twelve. Always was able to do a day's work. Had an attack of influenza in 1922. The acute symptoms were all over in a few days except a severe occipital headache which lasted four weeks. The nasal discharge had not been bad only during the first week. The headaches were gone then except for an occasional one, which was usually aggravated by head cold. In 1925, following a rather severe head cold, he began having pains in his left hip which were very severe at times. He received treatments for sciatic rheumatism and also was fitted with corrective shoes. There also were pains in the right sub-scapular region which were diagnosed "healed tuberculosis." In 1926 this man took violently ill while at work, became nauseated, had a diarrhea, and the following day was extremely exhausted. The pain in the occipital region of the head returned. However, there was only slight nasal discharge. The patient was treated for the "flu," but he did not recover enough to go to work for four months. He became very much depressed and lost interest in things surrounding him. He was then under the care of a physician who treated him for colitis, as the looseness of the bowels continued over a long period of time and he was on a rigid diet.

The occipital headache and pain in right subscapular region persisted. He was examined by an E. N. T. specialist who at that time was unable to find any pathology in the nose except deflection of the nasal septum. A submucous resection was done, but no improvement in condition resulted. X-rays of the gastrointestinal tract were made and a diagnosis of colitis was established. He stated that every time one of those severe headaches came on he was much worse. The gastro-intestinal symptoms were aggravated and the pain in the hip and back more severe.

In 1928 I first saw this man, and at that time he had one of those severe headaches, with an exaggeration of the symptoms mentioned. Examination of the nose revealed an inflamed and edematous mucous membrane in the region of the right ethmosphenoid region, and some rather dry muco-pus. During my examination of the patient I placed a pledget of cotton, moistened with a saturated solution of cocain, over the sphenopalatine ganglion and in a short time the pain had subsided. Later, an x-ray of the sinuses showed a thickening of the right sphenoidal mucous membrane; also, cloudy posterior ethmoid, right side. I operated this sphenoid, removing the anterior wall. In the next four months the patient had two attacks of headache which were relieved by blocking the spheno-palatine ganglion with saturated solution of cocain.

This man is now well, he works every day, and can eat anything he desires. This typifies a case of an unbalanced autonomic nervous system: The digestive disturbance brought about by the influence on the enteric plexus, the craniosacral autonomic, or through the vegetative nervous system; the pain in the right sub-scapular region from the fibers of the cervical ganglion which receives communication from fibers over the spheno-palatine ganglion; the occipital headache from the vidian nerve, or petrosal ganglion.

Case No. 2. Mr. R. B., age fifty-seven, attorney. Bronchitis for twenty years. Asthmatic attack past five years; lost several pounds in weight. Contracts colds easily. Past two months has not been able to work on account of asthma. Gets relief by taking ten miniums adrenalin chloride 1-1000 hypodermatically.

The examination revealed an ethmo-sphenoiditis on the left side, with hyperplasia of the mucosa in that region, and a post-nasal discharge of a muco-purulent character. While making my examination I placed a pledget of cotton moistened with ten per cent cocain solution over the sphenoid, which I intended to wash, and his asthma cleared up immediately. Desiring to try this experiment further I saw him at different times with one of

his asthmatic attacks and always was successful in relieving him. Later, however, I removed the diseased tissue in this region, removing anterior wall of sphenoid with drainage of the ethmoid, and he made a good recovery. Only a few days ago, one year after operation, I saw him and he has gained in weight, works every day, and said he had forgotten what asthma is like. The bronchitis also has improved.

This case represents the type that is due to reflex disturbance from the spheno-palatine ganglion. Stimulation of the fifth nerve ending in the nose excites the vagal nucleus and not only causes cardiac inhibitions and fall of blood pressure but also inhibition of respiration, and if we remove the stimulation the attack ceases.

Can we say this case of asthma was due to stimulation of the fifth nerve? The attacks were relieved by ten minims of 1-1000 adrenalin chloride. Who can say that these attacks were not brought about by the unbalancing effect of the autonomic control of the adrenals?

Case No. 3. Female, age fourteen, apparently in good health, except for a few pounds overweight. Measles and whooping cough in 1920. Influenza, confined to bed four weeks, in 1925. June, 1927, had tonsil and adenoid operation because of frequent colds and sore throat. December, 1927, became ill while attending a children's party. Was taken home and a physician called. She said she had eaten something that made her sick. The physician said he could find nothing wrong except she was extremely nervous. The mother said, when I saw the patient for the first time, which was in September, 1928, that she had not seen a well day since the time she came home from the party, and had everything wrong with her. She had an elevation of temperature most of the time. She always had a cold, complained of pains in her left arm, over the heart and stomach, was inclined to worry, was always afraid some of her playmates would get hurt; was always depressed. The mother would find her awake several hours after she had gone to bed, and she would say she was afraid to go to sleep—something might happen that she would not wake up.

This child had been examined by a very competent internist in another city, and the mother was told there was nothing physically wrong with the young lady but that she should find out why she had so many head colds. This I tried to find out. Temperature 100, pulse 110. The examination showed a rather pale mucous membrane in the anterior nares, with much turgescence of the turbinate bodies which was easy to shrink. In the region of the posterior tip of the right and left middle turbinates the mucosa was of a deep red color. This extended into the naso-pharynx. The x-ray report was that there was marked evidence of thickening in the posterior ethmoids, bilateral, with signs of soft posterior thickening in the floor of each antrum. I could find no evidence of acute head cold. I diagnosed the case as one of "hyperesthetic rhinitis" due to bacterial infection.

Treatment was by applying trichloracetic acid to the turbinates and blocking of the spheno-palatine ganglion on both sides with a saturated solution of cocain, and the application of a two per cent silver nitrate solution to this region brought about a cessation of all the symptoms. I have seen this patient twice in 1929 and once this year, with a slight head cold each time, and she remarked that it is not the kind of a cold she used to have.

I believe this case demonstrates the action of an irritant on the autonomic nervous system of which the spheno-palatine ganglion is a part. I have had patients complain of a sensation of fright when there was any work being done in the region of the spheno-palatine region. The pain in the left arm was no doubt reflex from this ganglion. The temperature due to disturbed metabolism, the results of a disturbed vegetative nervous system.

Summary: A careful history is necessary in all diagnostic work. Scant evidence of the local changes in the nasal mucosa when there is a long standing infection demands a close and exacting examination. We may not know exactly how and why changes are brought about through the autonomic nervous system, but facts are considered as facts to be scrapped with the advance of observation and supplanted by better working hypothesis.

Many of the cases do not need surgery and should not be cast aside, as they require just as much special treatment as do the surgical cases, and the results are just as gratifying.

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Discussion

M. G. Erehart, M.D. (Huntington): I am sure that there are many cases that are referred to the men in our line of work by internists for headaches and eye conditions and referred pains, and very often they have in mind that the symptoms are due to eyestrain or something of that nature. I have found in my work that in quite a large number of these cases, when we look over the nose carefully and examine the region of the spheno-palatine ganglion, we find the things the doctor has spoken of—congestion, a little muco pus, congestion of the posterior region of the middle turbinate, and in most of these cases by using a saturated solution of cocain over the spheno-palatine ganglion we get remarkable results. I have a great deal of respect for the posterior ethmoidal cells and for the sphenoids. In the surgery I do there I am not radical by any means. I try to establish drainage, and I have found, after assuring myself that that is where the trouble is, that if I inject the ganglion once, or maybe twice, it will clear up the condition which

has been existing perhaps for some time. I recall one case, a school teacher, who for a period of a year and a half had a great deal of trouble with her eyes. She had to hire someone to do her reading and writing; she had been forbidden to associate with groups of people; she had to avoid picture shows; she had to retire early at night. She was being referred to a specialist in Indianapolis, but her home happened to be in Huntington, and while she was there she came into my office. I examined her and found she had a spheno-palatine ganglion neuroses, and by using a little cocain on the ganglion on each side I obliterated a lot of her symptoms. I injected the ganglion and in about two weeks sent her back to work. That was the end of her trouble. I did not have to do any surgery, there was nothing in the way of pus, simply congestion on both sides, but this woman was completely incapacitated.

I believe if we would familiarize ourselves more with the makeup of the spheno-palatine ganglion, refresh our memories as to anatomical relationships, that there are a lot of referred cases from the internist that might be cleared up without resorting to surgery.

In regard to asthmatic conditions, I think there is no question that there are certain cases in which we have reflexes from this ganglion that produce a typical asthmatic condition which does not seem referable to any idiosyncrasies, or to something which might be inhaled. In one case I have at present, the woman has had severe pains over the left side of the head, in the occipital region, over the left scapular region, and yesterday I found a small polyp in the region of the spheno-palatine ganglion. I have no doubt that when this is cleaned up the symptoms will be relieved.

I believe this paper should be given considerable discussion. It will do us good to refresh our memories as to the anatomical and neurological relationships.

JOHN F. BARNHILL, M.D. (Indianapolis): You are all perfectly familiar with the fact that some fifteen years ago Dr. Sluder brought this question forward, and as a result of his advocacy many physicians began to look to the ganglion as the seat of many affections not only in the head but also in other parts of the body. The subject was given so much attention that every sort of ailment, almost, has been attributed to disease of the spheno-palatine ganglion. After more mature deliberation on the part of the profession, however, it is now the belief of a large percentage of the most competent observers that Sluder went too far in his estimate of the cause of disease as having origin in this ganglion. However, there are numerous instances that can be cited by everyone who practices our specialty, instances such as Dr. Van Osdol has reported, in which the relationship between the ganglion and disease can be traced readily.

I wish to emphasize the importance of the thing that Dr. Van Osdol has brought forward very clearly, namely, the relationship of the autonomic and other nerves which supply this ganglion. Such knowledge of the anatomy makes it easy to understand certain headaches originating in this ganglion and suggests how relief may be obtained by correction of conditions in the neighborhood of the ganglion and of the sphenoid sinuses. So there will always be interest attached to what Dr. Van Osdol has pointed out, namely, the method of diagnosis by means of anaesthetizing the ganglion and putting its function in abeyance for a time. This should be practiced to determine whether or not the ganglion is involved in any case, because if cocaine does not relieve the pain, the affection present is not caused by the ganglion and it is not at all probable that treatment of the ganglion by any means will permanently relieve the condition.

My own experience of over fifteen years, in which I observed this ganglion as a possible cause of disease, seems to justify the opinion that the spheno-palatine ganglion is not so often a factor in disease as has been alleged. Doctor Van Osdol's paper clearly indicates the type of case that does exist, and states in a sensible way the mode of treatment once the diagnosis of spheno-palatine involvement is determined.

B. W. EGAN, M.D., (Logansport): A few years ago I was very enthusiastic about the treatment of the spheno-palatine ganglion, and I secured some very brilliant results. I do yet, occasionally, but not always. Concurring with what Dr. Barnhill said a few moments ago, three years ago at the Hajek Clinic they were using the method of Sluder, but they did not get the brilliant results that Sluder claimed. I got some very decided results from treatment of the spheno-palatine ganglion, but in some cases that seemed exactly similar I had some dismal failures. Why, I do not know. I have reached the point where, if I think the case is due to spheno-palatine ganglion trouble I go so far as to cocainize it, but I have abandoned the injection of the spheno-palatine ganglion.

C. H. MCCASKEY, M.D., (Indianapolis): One point in Dr. Van Osdol's paper that should be emphasized is this: Is the cause of this spheno-palatine ganglion disturbance in the ganglion, or is it in the brain? May it not be from some other source and in that way disturb the ganglion? I think we should take that into consideration in those cases in which we do not get relief by cocainizing the ganglion. We may find an infection somewhere else that produces this disturbance in the ganglion.

DR. VAN OSDOL, (closing): I wish to bring out this point: I realize, as you do, that blocking the spheno-palatine ganglion is not a panacea for all ailments, but this region is of diagnostic importance, and in our effort to arrive at a diagnosis if we find disease and inflammation in the sphenoethmoid region we should temporarily block the spheno-palatine ganglion and note the effect

When the internist refers a patient who has unexplainable symptoms, with a diagnosis that there is nothing wrong except the patient is having too frequent colds, we should look to this region of the nose.

The main object of the paper was to stimulate some thought regarding the autonomic nervous system, of which the spheno-palatine ganglion is a part, as a causative factor in disease. We have heretofore thought of these remote pains, gastro-intestinal disturbances, and many other ailments, as due to focal infections carried by the blood-stream and based on clinical findings. I am of the opinion that they are not all due to a bacteria-laden bloodstream, but may be produced by the autonomic nervous system, due to pathological changes in the region of the spheno-palatine ganglion.

WHY COLDS?*

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In order to approach this subject from the proper angle we must consider first of all the normal function of the nose and upper respiratory tract. After that we must find the various causes that disturb this function, and then we have the answer to the question, "Why colds?" The nose functions as a thermostat, a humidifier, a filter, and a protector against bacterial flora. As a thermostat it tempers the cold air to a moderately warm air before it reaches the lungs; as a humidifier it gives off six ounces of watery moisture during each twenty-four hours in order to maintain a protective film over the mucous membrane; as a filter it removes dust from the inspired air; as a protector of itself and the body, it secretes a thin albuminous liquid and has lymph follicles to guard the mucous membrane against bacteria in the air.

What are the causes that interfere with the normal function of the nose and upper respiratory tract?

First: Local conditions may prevent a free ventilation of the nasal passages, the para-nasal sinuses, and post-nasal space, or they may cause circulatory stasis, congestions and inflammations. The only *primary* nasal condition that of itself may cause a pathology is an obstructive condition due to a congenital or an acquired deformity. The remainder of the obstructive causes are the sequences of internal and external influences. Among these are polypi, vaso-motor hypertrophy of the turbinate bodies, hyperplasia, adenoids, sinusitis, enlarged tonsils, post-tonsillectomy scars, and foreign bodies in the nose and neoplasms.

Second: The *internal* influences are those which cause a disturbance of the quality and quantity of the blood supplied to the upper respiratory tract. Among these are an acidosis, an imperfect metabolism, a diet deficiency in Vitamin A, a sudden chilling of the body or parts of the body (causes a vaso-motor disturbance with a resulting engorgement of the inferior turbinates), an intestinal putrefaction with an absorption into the blood stream of toxines from the intestinal tract, fatigue, exhaustion and starvation. All these are internal causative factors that lower the natural immunity to pathogenic bacteria.

During the holiday season when all of us feast upon rich cakes, puddings, pastries, candies, we overload our digestive organs with food material that cannot be "burnt up." The resulting toxic condition of the blood stream hinders the nourishment of the mucous membrane of the respiratory tract, and the bacteria multiply in the weakened membrane, resulting in colds, sinusitis, pharyngitis and tonsillitis.

Frequently when we develop diseases of the respiratory tract or those with origin in the respiratory tract we recall a slight indigestion for several days previously. I have found, if you will pardon a reference to my own experience, that, in my many years of treating various forms of intra-nasal infections, I have myself contracted them only when my normal resistance was lowered by a temporary indigestion, or when I had been exposed to a low atmospheric humidity. Whether you call this state that exists in such cases an acidosis due to imperfect oxidation of the sugars or the proteins, or whether you say it is a toxic state due to absorption of toxines from the alimentary tract matters little—the lowered resistance permits bacterial infection.

In many instances protein poisoning causes a vasomotor disturbance which results in engorgement (or hypertrophy) of the inferior and frequently middle turbinates, disturbing their normal function.

Another internal cause which has been verified experimentally by Wollach and Howe of Harvard Medical School, is the deficiency of Vitamin A in the diet, causing the epithelium of the whole upper respiratory tract to atrophy and be replaced by a keratinized epithelium, which breaks down the local resistance, allowing bacterial infection in the nose, pharynx, tonsils, larynx, bronchi or lungs. From these experiments it would appear that Vitamin A is a very important nutritional element in the support of a healthy mucous membrane.

Third: External or active influences which cause colds are irritating dust, fumes, noxious gases, sudden changes of temperature, low humidity, and the ever-present bacterial flora. The various pathogenic bacteria appear in the upper respiratory tract in the following order of frequency: pneumococcus types IV, II, III; streptococcus hemolyticus and non-hemolyticus; staphylococcus albus and aureus; bacillus influenza; micrococcus catarrhal; diphtheroid bacillus; coli communis; bacillus aureus and proteus; Freidlander's bacillus and other varieties which are less common.

*Read before the Fourth District (Indiana) Medical Society, May, 1930.

The mere presence of the bacterial flora is of minor importance in the absence of all other causative factors. Experimentally it has been proved that one cannot bring on a cold by the inoculation of a healthy nose with secretion from an acute rhinitis. (This statement is questioned by late experiments which point to a non-filtrable virus as playing an important role.) This shows that bacterial flora in the nose and upper respiratory tract do no harm as long as the epithelium is intact and healthy. The pneumococcus is recoverable from the respiratory tract of practically all individuals at all times, yet comparatively few persons develop the disease which they cause; the same thing is true of the streptococcus, the staphylococcus, the catarrhal bacillus and other pathogenic organisms.

The mucous memberane of the whole upper respiratory tract and lungs secretes about one and one-half pounds of water each twenty-four hours in a normal atmosphere, for the protection of the delicate epithelium from harm, just as the lachrymal gland secretes a fluid to protect the epithelim of the cornea, without which the cornea would be destroyed in forty-eight hours. If through external or internal influences or both the moisture is not maintained over the mucous membrane, destruction of the epithelium follows.

All things that come in contact with the mucous membrane of the nose whether intentionally or inspired into the nose through the air we breathe, and that are irritating to the membrane and cause corrosion or exfoliation of the surface epithelium, are potent factors in the production of colds.

Dust particles in the air, especially those of soluble lime are exceptionally irritating and cause corrosion. A sudden change in the temperature of the air we breathe, fumes of noxious gases, and excessively dry atmosphere are destructive forces.

The lime dust of a Sunday afternoon automobile traffic is destructive to the epithelium cells, and the bacterial flora present at all times gain a foothold in the denuded surface—result, a cold. The same is true of irritating dust in sweeping with a broom, or the dust behind threshing machines and of various dusty vocations. But the most serious source of injury to epithelial covering of the mucous membrane is drying due to low humidity of the atmosphere in artificially heated homes, public halls, schools and places of business. The effect is well illustrated in the epidemics of colds among school children when fall heating begins. The upper respiratory tract cannot protect itself, except for a short time, against bacteria or irritating foreign matter in an atmosphere of low humidity. *The membrane becomes too dry to function properly as a filter, thermostat, or humidifier,* and the bactericidal function is practically destroyed. The surface epithelium in a low humidity is exposed to the destructive influence of dryness and foreign matter in the atmosphere which it cannot resist indefinitely. The destruction is followed by bacterial infection—colds.

In order that the nose may function normally the atmosphere indoors should be of a humidity of fifty per cent saturation, and a uniform temperature of sixty-eight to seventy degrees Fahrenheit. Any marked variation from this humidity and temperature is an agent for respiratory infection.

With the present-day trend toward the removal of the causes before treating cases, one must take into account the influences that contribute to the development of bacterial infection. Those that predispose to respiratory diseases are two distinct sets: the internal, those systemic conditions that interfere with a wholesome nutrition to the structures involved—acidosis, toxemia, deficiency in Vitamin A, fatigue, exhaustion, starvation; external, bacterial flora, fumes of noxious gases, exposure to cold winds, low humidity of the air; as well as the pathology in nose, throat and chest.

HISTORY OF MEDICAL EDUCATIONAL INSTITUTIONS IN INDIANA

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It is with no thought of completeness that the writer submits the following brief notes on the history of medical educational institutions in Indiana, but rather to afford a background for a better understanding of the status of modern medical educational standards and the relation of such standards to the public welfare.

It is, I think, a rather widely accepted belief that there exists a good deal of confusion in the public mind, not to say dissatisfaction, with modern medical practices. The high cost of medical service, the growth of various kinds of cults, some frankly commercial, some religious, some quasi-religious, but all professing to be able to relieve mankind of his diseases, all point to a confused state of the public mind relative to matters of health and disease. A partial explanation of this situation, I believe, is to be found in the profound change that has taken place in medical education in the last twenty-five years. As evidence of this, prior to the year 1908 not a cent of money had been contributed to the cause of medical education in Indiana, and the total resources of all medical educational institutions in the state were slightly in excess of $100,000. Today, such resources amount to approximately $4,000,000 — mostly from philanthropic endowments.

Corresponding with this physical expansion, and under the influence of the university-trained educator, who now has a hand in shaping the medical curriculum, medical education has for its object much the same aims as a liberal arts education—that is the stimulation of the spirit of scientific curiosity in the student. Medical education has been changed from a narrow, technical course in the art of medicine to a liberal course

in basic sciences, and, as a result, has tended to make of the medical graduate something more than a technically trained adviser.

It is, I believe, conceded that the medical student of today is the most serious minded, hardest working student on the campus, who takes himself seriously and who feels that he is in pursuit of a career that demands the best efforts of which he is capable. This broadening of the field of medical education has resulted in lengthening the course until, at the present time, seven years, following graduation from high school, is a minimum of time required by many medical schools. It has, at the same time, added tremendously to the expense entailed in acquiring a medical education. These facts contribute largely to the unequal distribution of medical graduates, who, on account of the long and expensive course of preparation, prefer to locate in larger cities where opportunities for professional success are admittedly better.

The story of medical education in Indiana begins with a brave but futile effort on the part of a small group of pioneer physicians at LaPorte, Indiana, in 1842, to improve the educational standards of the profession which they honored. For sixty years following this date many similar efforts in various cities of the state were made to organize and maintain medical colleges. Some of these schools were organized by men of high professional accomplishment and with an earnest and intelligent effort to improve the medical educational standards. Some were frankly commercial and appear to have had no object other than an exploitation of personal ambitions. Some were the outgrowth of sectarian systems of therapeutics, which today have practically disappeared from the field of controversial medicine.

Between 1842, the date of the organization of the LaPorte Medical College, and 1905, the date of merger of all the then existing medical colleges except one, into the Medical Department of Purdue University, the records show that twenty-four medical colleges had been organized in the state. Indiana stands fifth in the number of medical colleges organized, being led by Illinois, Missouri, Ohio and New York.

In February, 1842, the Medical Department of LaPorte University was organized. The moving spirit in this school seems to have been a Dr. Meeker, who prior to the organization of the school delivered lectures to private classes. A current issue of the *"LaPorte Co. Whig"* of 1842, after naming the faculty, says in an editorial—"These gentlemen are now giving their first lectures to an attentive and intelligent class. This institution now in its infancy gives the flattering assurance to this western country of its future high destiny and extensive usefulness." This short comment, culled from the files of almost a century old newspaper, breathes the spirit of dignified and hopeful optimism with which our forefathers viewed the founding of a pioneer institution. By 1847 the school had 104 students and was considered to be one of the best in the west. The other department of the university did not thrive, so that in 1847 the name of the medical school was changed to the Indiana Medical College.

Rush Medical College, at Chicago, and the Medical Department of the University of Michigan, at Ann Arbor, both located in relatively close proximity to LaPorte, and organized at about the same time, were much more substantial institutions and gradually drew the patronage from the LaPorte school. It ceased to exist in 1857.

The next serious attempt to organize a medical college in Indiana occurred in Indianapolis in 1869, when the Indiana Medical College was organized. This date marks the beginning of leadership in medical education, which Indianapolis has maintained until the present time. Insofar as the organization of its faculty is concerned, this institution continued to exist, although frequently changing its official title, until its final merging with Indiana University, a period of thirty-nine years. Briefly stated, the facts of its official career are as follows: Organized in 1869; merged with Central College of Physicians and Surgeons of Indiana in 1878 to form the Medical College of Indiana. In 1895, it became the Medical Department of the University of Indianapolis; in 1905 merging with Central College of Physicians and Surgeons of Indianapolis, and the Fort Wayne College of Medicine, of Fort Wayne, to form the Indiana Medical College, School of Medicine of Purdue University, and finally in 1908 it was withdrawn from Purdue and became the Indiana University School of Medicine. This date (1908) marks an epoch in the history of medical education in Indiana, as it was at this time that the privately owned and controlled medical college ceased to exist, and the assumption by the state of the responsibility of medical education. At the time of its final merger with Indiana University, the Indiana Medical College closed a long and honorable career. It had graduated some 1,600 students, accumulated property to the value of $100,000, which was turned over to the state as a gift. It had numbered among its teachers many of the leading practitioners of medicine and surgery in Indianapolis.

Ten years following the organization of the Indiana Medical College, or in 1879, the Central College of Physicians and Surgeons was organized in Indianapolis. Though somewhat limited in resources, this school continued in active existence until 1905, at which time the merger with Purdue occurred. It numbered among its faculty some of the most brilliant medical minds of the state.

The Fort Wayne College of Medicine was also organized in 1879, and continued until its merger with Purdue University in 1905. A number of prominent Indiana physicians have been members of the faculty of this institution, and its presence

in Fort Wayne is an indication of the leadership in medical education which Fort Wayne always has maintained.

These three schools, the Medical College of Indiana, the Central College of Physicians and Surgeons, and the Fort Wayne Medical College, may be said to have largely dominated the field of medical education from the middle of the last century, 1850, until the final merger with Indiana University in 1908. Under the limitations of their resources, they made an honest and intelligent effort to discharge the duties and responsibilities which they had undertaken. It may be said without prejudice that the men responsible for these institutions maintained the high traditions of personal service, sacrifice, and ability in teaching that has not been excelled in this state.

Any discussion of medical schools and medical education in Indiana would be incomplete without reference to the existence of a number of colleges organized specifically for the teaching of certain so-called "sectarian systems of therapeutics." The present generation of physicians happily has been spared the deep-seated hatred and intolerance which prevailed a generation ago and divided the medical body into hostile groups of bitter antagonists. The story of this schism, that almost wrecked the medical profession as an instrument of public welfare, is an old and long one. The intolerance which seized and entirely possessed the medical minds of that day resulted in absolute professional and social ostracism of the adherents of the various opposing systems of therapeutic practice. There probably never has been a better demonstration of the liberalizing influence of knowledge and education upon the spirit of intolerance than the history of medicine shows. As soon as young men began to be taught the same scientific facts in chemistry, biology and physics, there was no longer room for a spirit of intolerance upon the subject of therapeutic practice. There is and always will be an honest difference of opinion as to the relative value of therapeutic agents, but it will not be based upon a spirit of intolerance which springs from any school or system of therapeutics.

The records show the existence of six schools of this type—four eclectic medical colleges and two physio-medical colleges, all of which are now extinct. The four eclectic medical colleges were located in Indianapolis, never prospered and were in existence but a short time. One of the physio-medical colleges was located in Marion, and the other in Indianapolis. The latter, which was called "The Physio-Medical College of Indiana," was organized in 1873 and graduated a class each subsequent year, including 1909, when it became extinct. This school flourished for a period of thirty-six years, only three years less than the Indiana Medical College, which makes its life the second longest of any medical college in the state. It is the only one of the sectarian schools that made a serious attempt to meet the growing requirements of medical education. Among its faculty were a number of well known medical practitioners of Indianapolis. There are a considerable number of successful physicians, members of the local medical society in Indianapolis who are graduates of this school.

Among this group of sectarian schools was one, unique in its aims and avowed purposes. It adopted the ambitious title—"The American Medical College." It proposed to be the center of a national medical organization, named "The American Association of Physicians and Surgeons," and had as its official publication *The Medical Free Press*, published in Indianapolis, a few copies of which may be found in the Indiana state library. Quoting from an address delivered by the Hon. Will Cumback at a commencement exercise of this institution in March, 1896, the ostensible aims of the school were as follows: He said: "This is the first college in the world which has for its object the teaching of all medicine on a scientific basis, teaching medicine in all its phases, with a view of breaking down sectarian bigotry." The simple method by which this school proposed to destroy "sectarian bigotry" was to teach all schools of medical practice, regular, homeopathic, eclectic, and physio-medical, giving the student his choice of enlisting under the banner of calomel and quinine, echinacea, passiflora, or Lloyd's specifics. This address of Mr. Cumback's is well worth reading, as it shows the confused and irritated condition of the public mind on medical matters as well as a complete ignorance of the methods necessary to correct the faults he so bitterly and justly criticised. This school was organized in 1893 and became extinct in 1897.

The final step in the evolution of medical educational institutions began in 1903, at which time negotiations were begun on the part of a group of Indiana medical colleges to unite with the state university. As already indicated, this step was inevitable. The growing demands of medical education, requiring heavy financial support, made it impossible for the privately owned school to meet the demands. Either state aid or philanthropic endowments, or both, were necessary for the maintenance of medical institutions of sufficient merit to justify continued existence.

Philanthropic endowments on behalf of medical education, such as are being built up under state administration at this time, could never have been obtained for the privately owned medical college. The steady stream of endowments, which, since 1908, have flowed into Indiana University for the support of medical education is an abundant justification of the wisdom of the men who, at a large sacrifice of personal interests, advocated and finally succeeded in merging all the then existing medical schools, except one, in the state, and subsequent union with the state university.

It would be a mistake, however, to assume that the events associated with the merger of medical

schools into the state university were always peaceful and marked with good will. Probably the fiercest medical war that ever occurred in the state broke out. The public press took notice, and there was hardly a community in Indiana that did not feel the effects of this contest. Inasmuch as the two state universities, Purdue and Indiana, were involved, loyal alumni interested themselves in the controversy, with the result that medical education was the most widely discussed topic of the day.

The merits of this controversy have ceased to be of interest and have no historical significance, for the reason that the issues involved were predominately personal. It could make but little difference to the cause of medical education whether the state undertook this responsibility through the Indiana University, at Bloomington, or through Purdue University at Lafayette. The vitally important thing was to get the state to undertake the task and assume the burden.

It appears, from this distance, that the whole question of whether it was a wise policy for the state to assume control of medical education or not was lost sight of in the fierce struggle between Indiana University and Purdue University to get possession. It is at least questionable if the issue before the state legislature had been state control or no state control, rather than Indiana versus Purdue control, whether the state would have accepted the offer of the medical schools.

Indiana always has been a very conservative state and a relatively poor state, from the standpoint of taxable income. Only sixteen other states at this time had made similar provision for medical education, and there was no large public sentiment in Indiana favoring such a radical movement. With the real issue thus clouded by the partisan struggle of the two universities, medical education became a responsibility of the state, to be managed under the administration of Indiana University.

With the completion of this final step in the evolution of medical educational institutions in Indiana, a new epoch was initiated, the final chapters of which remain to be written. It is worth our time, however, to recount briefly the growth of the Indiana University School of Medicine since its organization twenty-one years ago, as shown by the value of its plant and physical equipment. These figures graphically demonstrate the generous response of philanthropic citizens of the state to the welfare of the indigent sick, and from which medical education derives its greatest asset —that is, an abundance of clinical material for teaching purposes.

The figures are obtained from the biennial report of the trustees of Indiana University for the fiscal years ending September 30, 1927, and September 30, 1928. The total value of lands and physical plant of the Indianapolis division of the University, which includes the Robert W. Long Hospital, the James Whitcomb Riley Hospital, the William H. Coleman Hospital, the Ball Home for Nurses, and the Medical School Building, is $3,465,113.91. This amount is only $23,259.13 less than the value of the lands and physical plant of the Bloomington division located at Bloomington. If the value of the dental school land and physical plant of $42,458.02 be added to the Indianapolis division, we have the unique situation of an excess in value of the Indianapolis division over the Bloomington division of $9,198.89.

Thus the state, at the end of twenty-one years of the administration of medical education, finds itself in the possession of property valued at $3,674,523.39, devoted to this purpose, compared with $100,000, the estimated value of property which was given to the state by the merger of medical colleges and which represented the total valuation of property devoted to medical education at that time. The significance of these figures lies in the profound change indicated in public opinion that has occurred in the last twenty-five years toward the problems of medical education. Prior to state control, not a cent ever had been contributed by philanthropic agencies for this purpose. Dr. Theodore Potter, of Indianapolis, in a paper on the status of medical education in Indiana, read before the Indianapolis Literary Society, complained of the total ignorance and lack of sympathy on the part of the public toward the problems of medical education. He cited the scandals associated with the obtaining of proper dissecting material for teaching purposes, and which so nearly brought a number of prominent Indianapolis physicians in conflict with the law, as an example of public ignorance and lack of sympathy with medical institutions.

Since the writing of this paper by Doctor Potter twenty-five years ago, and which so clearly portrayed the status of medical education at that time in this state, amazing changes have taken place. No legal restrictions hamper medical institutions; sectarian dissension no longer divides professional opinion, and state and private funds amply demonstrate public sympathy for the aims of medical education. In the place of numerous medical schools, restricted by lack of funds and isolated from the scholastic atmosphere and influence of University connections, Indiana now has one medical school, whose record of accomplishment entitles it to the support of every Hoosier physician. Whatever doubts may have been entertained as to the ultimate success of a union of the medical educational interests of the state with the State University, giving the premedical instruction at Bloomington and the clinical instruction at Indianapolis, time has demonstrated to have been unfounded.

PRACTICAL DIPHTHERIA IMMUNIZATION*

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The purpose of this paper is to sell diphtheria prevention to the family physician by discussing from a practical point of view that information on diphtheria with which every physician should be familiar.

In spite of the fact that since 1913 there has been a safe and practically certain means of preventing diphtheria, there occurs annually in the United States approximately 10,000 deaths from this disease. It is true that a marked reduction in incidence and mortality has occurred with the extended use of active immunizing agents, but the present result falls far short of the theoretical possibilities. Carefully compiled statistics reveal that this reduction has been strikingly greater in certain states and communities than in others. Furthermore, it is important to note that in practically every instance where marked reduction has occurred, certain common agents have been active.

In general, it may be said that the work has been stimulated and directed by the various public health officials, both state and local, for they have appreciated fully the value of preventive measures in the control of the communicable diseases: the medical profession cooperated to the fullest extent for they were convinced of the value of the work, and appreciated their duty in advising immunization; school officials gave their support as the occurrence of diphtheria had resulted in serious interruption of attendance, and carriers had added another problem. Various unofficial agencies, active in public welfare work, gave their whole-hearted support, as was in keeping with the reason for their existence. Publicity campaigns were conducted selling the gospel of prevention to the parents themselves. Such combined effort resulted principally in immunization of a high percentage of children of school age, but unfortunately relatively few children of pre-school age were immunized,[1] and it is still in this age group that the highest mortality occurs. It is now generally agreed that if our goal is to be attained, some means of reaching the children of pre-school age must be found. Obviously, the avenue of approach to this group is through those members of the profession who have most frequent and intimate contact with them—namely, the family physician. To finish this work is his responsibility and he should assume it.

The entire problem of eradicating diphtheria would be solved if every physician would immunize all the children between the ages of six months and five years who come under his care. Until this is done, we are still dependent on the other agencies now active to reach the susceptible children in the school group, and we must be content with having only half finished a job the theoretical possibilities of which are possible to attain.

The importance of the physician being thoroughly familiar with every phase of diphtheria and its prevention cannot be over-emphasized. When he has familiarized himself—and the facts are available to all—he will be convinced of the value and safety of immunization,[2] and his remarks to the parents will carry the weight of his convictions. Unfortunately, some physicians feel that the patient should be seen and not heard, that their advice should be followed blindly and without question. This attitude is indeed unfortunate so far as our present problem is concerned, for it must be remembered that those parents interested in preventive medicine are intelligent; they are actually interested in what you advise them to do, and often questions will be asked. There must be no disagreement between physicians in answering these questions else doubt is raised in the parents' minds—often with undesirable results.

Experience in private practice has served to emphasize the importance of being well informed on certain questions. The following ones discussed are of most importance:

1. *Immunizing Agents:*

(A) Antitoxin.

It is unfortunate, but true, that there is even among physicians a certain lack of knowledge regarding the various agents used in the production of immunity against diphtheria. Antitoxin, which is most frequently used in the treatment of diphtheria but is also used to protect susceptible contacts, produces only *passive* immunity which is of short duration, probably rarely longer than three weeks. It should never be confused with other agents used to produce *active* immunity, the type of immunity in which we are especially interested when discussing diphtheria prevention.

(B) Toxin-Antitoxin.

Toxin-antitoxin is a mixture of diphtheria toxin and antitoxin, prepared as modified by Park, so that after three injections of one cubic centimeter at weekly intervals, active immunity is produced in about seventy-five percent of susceptible individuals. One of the common objections to this mixture is that it contains a small amount of horse serum, and some contend that this is sufficient to produce serum sensitization. Theoretically, this is possible but probably rarely if ever occurs.[2] This possible fault has been obviated by some manufacturers employing sheep or goats in the production of antitoxin used in this mixture. Toxin-antitoxin is available either in individual packages containing three vials, enough for one complete immunization, or in larger vials which reduce the cost of the material. This mixture should be kept on ice to prevent deterioration.

(C) Toxoid.

Toxoid is diphtheria toxin, detoxified by the technic as developed by Ramon, in France.[3] This

*This is the eighth article indorsed by the Diphtheria Prevention Committee.

is the most recent addition to our available immunizing agents. It has been used extensively in France, more recently in other portions of Europe and in Canada, and is now prepared and available in the United States. The dosage generally advised[3] is a *total* of three cubic centimeters given at three-week intervals, in three doses of 0.5, 1.0, and 1.5 cubic centimeters, respectively, following which over ninety percent of susceptible individuals are immunized.[4 5 6]

The increasing popularity of toxoid seems justified as it gives a greater percentage of immunes after three injections than does toxin-antitoxin. Furthermore, the possibility of serum sensitization is avoided. This mixture has been used to immunize infants and children who have had eczema, asthmatic bronchitis, seborrheic dermatitis and hay fever without any complications arising.[6] Another advantage is that immunity seems to develop more rapidly following the use of toxoid than with toxin-antitoxin,[5 6] and the above points should be seriously considered when choosing the immunizing agent.

2. *Age for Immunization.*

Infants born of mothers immune to diphtheria are also immune, but begin to lose this immunity usually between the sixth and twelfth month. As shown by the Schick test, the great majority of children between one and three years are susceptible and this is the most dangerous age. Therefore it is advisable to immunize all infants sometime between the sixth and twelfth month.

3. *Schick Test.*

(A) Materials and Technic.

By means of the Schick test, it is determined whether or not an individual is susceptible or immune to diphtheria. The technic is very simple but must be carried out with greatest care. Materials used must be of a fixed potency and proper interpretation of the reaction requires some experience.[7] The test materials are obtainable in packages of two vials each, one containing the undiluted toxin and the other the proper amount of diluent. Diluted toxin deteriorates rapidly and should be used within twenty-four hours after dilution. The injection is made intradermally, the amount to be injected being determined by the manufacturer's instructions found in each package. If the control test is not used, all doubtful, as well as all definitely positive reactions should be considered as positive.

(B) Test Previous to Immunization.

A Schick test previous to immunization is not recommended except for city children past six years of age. In this age group there are enough susceptible individuals to justify making the test. It is recommended by some that all children under ten years should be given the injection without the previous Schick test, and from the practical point of view there is much to recommend this.

(C) Test After Injections.

As not all children are rendered immune by the various materials and methods routinely employed, it is extremely important that a re-check be made from four to ten months following injections. Those still susceptible should be given another series of injections and a subsequent Schick test made as before.

4. *Injection of Immunizing Agent.*

It may appear presumptuous to discuss the actual giving of the injections but certain points are of particular importance. For psychological reasons, it is not advisable to prepare the injection in view of the child, or to mention the possibility of the injection hurting or being painful. However, if the child asks, be perfectly honest and tell him it might hurt a little bit, for a child who is deceived never gives the desired cooperation at subsequent visits.

As regards the technic of the injection itself, the skin is prepared as for any other hypodermic injection, tincture of iodin being preferred for preparing the skin. The syringe and needle are sterilized by boiling fifteen minutes, as this method insures sterilization and obviates the stinging pain that often results when sterilization is done by alcohol or some of the newer sterilizing solutions. A fine needle should be used, 26 or 27-gauge. The injection is made subcutaneously into the outer side of the thigh or of the arm, the needle being driven in vertically into a pinched up fold of the skin. The injection is made slowly and the needle withdrawn with a swift steady hand. No dressing is necessary.

5. *Development of Immunity.*

Immunity does not develop immediately following the injections but usually after a period of from three to six months. Tell the parents that it is quite possible for the child to contract diphtheria if exposed during this period. If this fact is not emphasized and the child does contract diphtheria, the method of protection is put into disrepute, when actually the physician is at fault in not explaining the possibilities.

6. *Fees.*

It is agreed that every physician should receive a reasonable fee for services rendered. In many communities certain plans have been formulated for popularizing diphtheria immunization by reducing the fees ordinarily charged for a hypodermic injection. This has occurred usually in the communities where the family physician has been slow to take up the work, and if objections have been raised by physicians to these plans the blame is probably on the shoulders of the physician himself. A plan that has been most practical is to name a certain fee for the entire treatment *including a charge for the subsequent Schick test.* The entire fee is paid at the completion of the injections and it is explained to the parent that the charges made include the Schick test to be made at a later date. Under such conditions little or no difficulty is experienced in getting the child back for the test.

As the smallest package of Schick test material obtainable is for ten tests, it is convenient and

economical to have at least that number of children tested on the same day.

Comment.

The preceding discussion relative to diphtheria prevention, materials and technic is intended to furnish only the minimum amount of information necessary to the physician doing immunizing work.

Lest the impression be given that one must explain diphtheria prevention in detail whenever the subject is mentioned, let it be said that most parents never question the propriety of the advice.

In conclusion, it may be said that our present methods of diphtheria prevention are inadequate, chiefly because the pre-school child is not being reached. It is up to the practicing physician to know about diphtheria prevention, to believe in it, and, above all, to talk diphtheria prevention to the parents of every child.

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INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar October 24, 1930)

The first Seminar of the school year was held in the auditorium of the Medical school building Friday, October 24th, at eight o'clock, Dean Emerson presiding.

MEDICAL CASE

E. G. BILLINGS, M.D.

The case that I wish to present for the Medical department of the I. U. hospitals is one which I believe to be a very interesting diagnostic problem. It is that of Mrs. C., age forty-nine, who entered the hospital on October 11th complaining of general lassitude, malaise, a tendency for the knees to hyperextend on walking, and gradual decrease in the size of the forearm and legs. The present condition became subjectively apparent some twenty years ago and since has progressively increased in intensity. Prior to that time she enjoyed excellent health and since then has experienced no disabilities other than the removal of a uterine fibroid ten years ago and the present illness.

In the family one brother died with a similar condition, and a nephew was recently seen in our out-patient department with a well advanced dystrophy quite similar to this presented.

On physical examination the voice has a nasal twang, there is a well marked decrease in size (due to atrophy) of the forearms in comparison with that of the arms, and that of the legs to that of the thighs. The flexor and extensor muscles of the toes and fingers are atrophied. There is considerable weakness of the tongue, the sternomastoid muscles, and of the arms and legs. The labia-minora and majora are also atrophic. The deep tendon reflexes vary from day to day; but, in general, are hypoactive with an exception of the knee jerks which are entirely absent. No pathological reflexes have been demonstrated. Cutaneous sensibility is intact. An early cataract, said to be of the senile type, is present in the right eye. There is no reaction of degeneration of any of the involved muscle groups. The gait approaches that of the steppage type; and, as noted in the motion picture, there is a considerable tendency for the knees to hyperextend while walking and standing. The station is normal. It is also of interest to note that on releasing an object held in the hand the speed of the act is considerably slowed and somewhat stiff in character.

Laboratory work including spinal fluid examinations, hemocytology, and blood serology all has been negative. The metabolic rate is minus eleven per cent. The study of a section of the soleus muscle shows fragmentation and degeneration of the fibres, a partial replacement of the fibres by connective tissue and fat, a concentration of the nuclei of the sarcolemma, and a preservation of the transverse striations.

In conclusion, the case which I have just presented is that of a progressive muscular dystrophy beginning in the second decade of life, of twenty years duration, and showing a familial tendency. The exact type of the dystrophy I can not say. It is not the neural-neuritic type of muscular atrophy, there being no paresthesias nor reaction of degeneration of the muscles. It might fall into a class of the myotonic atrophica group but in this instance there is no involvement of the orbicularis oris and oculi muscles, no marked involvement of the thigh muscles, no lacrimation which is so common in this group, no articular difficulty; but, the presence of the cataract, the familial occurrence, a tendency toward the myotonic stiffness of the extensors of the fingers and hands as well as the slight involvement of the sternomastoid muscles and those of the shoulder girdle and the marked atrophy of the legs and forearms is somewhat in favor of this classification.

ORTHOPEDIC CASES

JOHN SHATTUCK, M.D.

Case 1: Sporadic Cretinism. The patient, a white male, age eight years, was admitted to the Riley Hospital on October 3, 1930, complaining of (1) inability to talk, (2) failure to learn properly, (3) stunted growth, (4) incontinence of urine and feces.

The patient had normal delivery; birth weight not known, but child appeared to be of average size. He was breast-fed for the first two or three

months, and bottle-fed until four or five years of age. Had measles at five years, and pertussis during August, 1930. No other illness.

The family first noticed the child was abnormal about the eighth month of life. At that time he could not hold up his head; has never controlled his urinary bladder nor rectum; has been able to walk around home a little, but gait is unsteady; he appears to be walking on his toes.

Family history: Mother, aged twenty-seven years; father, aged twenty-eight years; both living and well. Three younger brothers, all normal. No history of idiocy, goiter, nor of similar disturbance in the family.

Physical examination reveals a patient with stunted growth and disproportion in body development. Face quite broad and forehead low; eyes wide apart; ears large; thick and waxy; root of nose low, nostrils broad and flattened; lips thick and protruding. The mouth is usually held open and the patient frequently drools. The tonsils are hypertrophied and adenoids large.

The teeth are not well formed and the enamel is imperfect. The chin is short and double. The neck is short, and the thyroid gland cannot be palpated.

The scapulae are winged. The spine shows a cervical kyphosis and lumbar lardosis. The chest is distinctly rachitic. The abdomen is prominent, large, pendulous, and tympanitic. An umbilical hernia is present. The rectal sphincter has a poor tone.

The extremities are quite short. The hands are short, thick, and cyanotic; they are clumsy and spade-like.

The skin is cyanotic, dry, cold, loose, and has lost its elasticity. It is leathery, thick, yellow and wrinkled. The hair is coarse, dry and sparse.

Chvostek's phenomenon is present. The patient walks with a swaying unsteady gait, the head a little forward.

The skeletal muscles are exceptionally well developed, all the muscular movements are difficult. The voice is rasping.

Mentally, the patient has no reasoning power; but he is capable of being trained for very simple tasks.

On admission the patient weighed thirty-seven pounds, and he was thirty-six inches tall. This is the average height for a child two and one-half years of age, and the average weight for a child of three and one-half years old.

The circumference of his head is nineteen and one-half inches or equal to that of a child of two and one-half years. Circumference of his chest is twenty-two inches or equal to that of a child of five years. His cephalic index is seventy-six which is normal.

Laboratory work: R. B. C. 3,800,000; Hgb. eighty per cent; W. B. C. 8,500; differential count, normal; urine sp. gr. 1030; no sugar or albumin; blood Wassermann, negative. Manitoux tuberculin test, two plus. Attempts to take his metabolic rate failed because of the inability of the patient to cooperate.

X-ray examination, as follows: Films of the lower extremities show the bone shaft to be short but otherwise of normal ossification for a child his age. Films of the elbows and forearms show the epiphysis of the radial head to be in the stage of development ordinarily found at about two and one-half years of age. The epiphysis of the lower end of the ulna which ordinarily appears at about the fourth year has not yet appeared in this patient. There is no abnormality in the epiphyseal lines. Bones here are short also. In the carpals, metacarpals, and phalanges, the bony development is approximately that ordinarily found at five years of age. An A. P. and lateral of the chest show the bony structure to be of rachitic type with decrease in the normal transverse width. There is no evidence of a persistent thymus. Stereo films of the skull show the fronto-parietal suture lines widened. Fronto-occipital view of the skull shows the occipito parietal sutures to be widened. The suture lines between the sphenoids and occipital bones are fused.

The etiology of sporadic cretinism is the result of congenital absence, complete atrophy, or a serious post-natal disease of the thyroid gland.

This case is presented because of the rather typical picture of a cretin which he possesses, and because these cases are comparatively rare in this vicinity.

Case 2: The second patient, a white female aged eighteen months, was admitted to the Riley hospital on October 14, 1930.

This patient has a broad, flat face; broad nasal bridge and prominent cheek bones; oblique and narrow eye-slits with scanty lashes; a tongue which is quite large, its dorsum wrinkled and its circumvallate papillae huge. The tongue seems to be too large for the patient's mouth.

The skin is normal, not dry; the hair is fine and the nails are normal. The general musculature is soft and flabby and the joints are quite relaxed so that unusual positions can be obtained. The patient is rather alert mentally and seems to notice what is going on about her.

This patient is presented in contrast to the first, showing the difference between Mongolian idiocy and cretinism.

SURGICAL CASE

FRANK B. RAMSEY, M.D.

I present this case as an example of the use of intravenous solution in making a pyelogram and also the use of spinal anaesthesia in urologic surgery.

This man is forty years old. He was in good health until about three years ago, when he was hurt in an accident which injured the lower part of his back. At that time he complained of pain in the left loin and haematuria. He suffered these attacks at intervals for three years. On admission to the hospital on September 15, 1930,

an x-ray was taken which showed a shadow in the region of the left kidney. The general physical examination was negative at that time. The laboratory work was negative. His phthalein function was over fifty per cent; the urine negative for albumin, and contained only a few pus cells and red cells.

This man has a very small urethra, admitting only a number twelve French sound, and due to this fact an infant cystoscope must be used to cystoscope the bladder. Rather than do that we took advantage of uroselecton and injected forty grams of the solution. An x-ray plate was taken fifteen minutes after the injection. We secured a very excellent pyelogram showing the right kidney and ureter normal, the left kidney normal except for a stone which occupied the middle calyx and a stricture of the left uretero-pelvic junction. This solution is practically non-toxic when injected intravenously, and is secreted in high concentration in the urine. The plates after injection are usually taken fifteen minutes, thirty minutes, one hour, three hours, and twenty-four hours afterwards; those at fifteen and thirty minutes are usually the ones that demonstrate the pathology.

On September 29th this man's left loin was explored under spinal anaesthesia. An incision was made in the pelvis, the stone removed from the calyx, and investigation made of the ureter at the point where it joined the pelvis of the kidney. The kidney had been completely delivered through the incision, and after the adhesions were released and the ureter dilated and an adherent blood vessel divided the kidney was replaced in the flank. A catheter was introduced through the incision so the pelvis would drain, and at this time he has a slight amount of urine through the incision.

His convalescence was satisfactory except for the development of an epididymitis, which cleared up quickly. On the sixth day thereafter he had a sudden rise of temperature to 105 degrees. The catheter was removed from the incision and some large flakes of calcium salts found. These were cleared off, the catheter reinserted, and his temperature came down to normal.

OBSTETRIC CASE

Dwight L. DeWees, M.D.

This case is presented as showing an unusual complication which occurred during labor.

This pregnancy progressed normally until the eighth month. The patient was admitted to the Coleman hospital at 12:10 a. m. October 10th. She was extremely exsanguinated, having been bleeding since six o'clock the evening before. At that time she had had a normal bowel movement, and shortly afterwards began to suffer mild cramps in the abdomen, followed by fluid passing from the vagina, which on examination proved to be blood. She bled very profusely, became weak and nauseated and vomited. Following this she became faint and was put to bed. The doctor who had been giving her pre-natal care could not be found and another one was called. On examination he found a large amount of clotted blood in the vagina, which was removed. The hemorrhage seemed to be controlled, but on returning about eleven o'clock the doctor found her in a critical condition and sent her to the hospital.

On admission to the hospital she was very pale and was practically comatose. She was placed in bed and a preliminary examination made. She was drowsy but restless, and although she did not show profuse perspiration, there was every other sign of shock. The breathing was shallow and rapid. The uterus was tonic; no fetal heart was heard. When she was admitted there was some bleeding, but when she was put to bed this slackened. Immediately blood was drawn from patients and relatives and compatibility tests for blood transfusion were run. As soon as a compatible donor was obtained she was given 770 cc. of blood by the Kempton-Brown method. We did not need to use an anaesthetic to lessen the pain. The blood pressure before the transfusion was practically unobtainable; pulse, about 130 per minute. While on the table receiving the blood she reacted remarkably well and became conscious and rational. Immediately after the blood transfusion she was taken to the delivery room and prepared for delivery. Examination showed the cervix about three and one-half fingers dilated, and it was thought the margin of the placenta could be felt on the left side of the cervix. The membranes were ruptured and in a few minutes the head came down and she was delivered of a dead premature fetus by the use of low forceps. Immediately after delivery the placenta floated out with about a quart of clots behind it. We diagnosed this as marginal placenta *praevia* complicated with a premature separation the cause of which was unknown. One hour after delivery the blood pressure was 110 systolic, 80 diastolic.

The past history was absolutely irrelevant. The patient always has been well; has had no illnesses except measles and mumps in childhood. About three years ago she did suffer from burning and frequency of urination which lasted for three weeks and cleared up with some medical treatment and forced fluids. She never had profuse vaginal discharge. The menstrual history is negative. She began to menstruate when fourteen years old, the periods were at six-week intervals and lasted five days; were very painful until after her first child was born. The first child was full term, normal delivery, and is living and well.

The red blood count was 2,100,000 two days after delivery. Four days after delivery she received 800 cc. more of whole blood. At present she has a red blood count of over 4,000,000, and a normal white count. Urine analysis negative.

The only other treatment was that immediately after delivery the uterus was packed with plain

gauze so as to run no chance of bleeding from an atonic uterus; this was removed two days later. At no time has her temperature been over 100 and at present it is normal.

On the ninth day post partum a vaginal examination was made, at which time it was found the cervix had suffered a rather deep laceration on the left. The uterus was well involuted and firm and the adnexa negative.

This patient is now in good condition and ready to go home.

PEDIATRICS CASE

Louis E. Burns, M.D.

E. M., female child age twenty-three months admitted to Riley hospital August 9, 1930, for repair of cleft palate.

This youngster was scheduled for admission April, 1930, but due to the fact that she developed whooping cough her admission was postponed to a later date.

History obtained upon admission was essentially negative, except for the fact that her palate was open.

Physical Examination: Small female child about two years of age in good health, smiling and playing with a toy.

Head: Normal in size and slight enlargement of frontal bosses.

Eyes: React to light and accommodation—follows objects—no nystagmus—lids open and close normally—no lag or drooping of lid.

Ears: External canal clear, except for very small amount of cerumen. Drums—pearly gray in appearance. No inflammation or bulging. Mastoids—about normal in size—no tenderness.

Nose: No inflammation—no discharge.

Lips: Upper lip, scar to left of midline, apparently from repair of harelip.

Palate: Both hard and soft palate open from about one-fourth inch anterior back posterior through the entire soft palate.

Pharynx: Slightly inflamed. No discharge noted on posterior pharyngeal wall.

Tonsils: Both tonsils hypertrophied, no pus could be expressed. Anterior pillars dusky red.

Neck: Thyroid not palpable. Cervical adenopathy anterior groups—posterior group not palpable.

Chest: Apparently normal with beading at costo-chondral junction.

Heart: Rate and rhythm regular. No murmurs.

Lungs: No areas of dulness, resonant throughout. Tactile fremitus normal.

Abdomen: Essentially negative.

Extremities: Slight flaring of wrists, otherwise negative.

Diagnosis:

1. Congenital malformation of face.
2. Rickets.

Three days after admission the nursing staff reported child was exceptionally drowsy, had to be aroused to take formula or water and her drowsiness began the day following admission and had been getting progressively worse.

Examination at this time revealed the child lying in bed, both eyes closed.

Breathing short inspirations simulating a soft snort and prolonged expiration. Sweetish odor to breath. Eyeballs very soft. Eye grounds normal—no exudate—disc normal.

Face—expressionless.

Lungs—normal.

Heart—tachycardia. Present rate not counted.

Abdomen—not distended. No masses palpable—no rigidity. Reflexes diminished.

Catheterized specimen of urine showed a trace of albumin and fifteen milligrams of sugar per cubic centimeter.

Blood was immediately drawn and found to contain 476 milligrams per 100 cubic centimeter.

A diagnosis of diabetic coma was made and treatment instituted accordingly.

She was given ten units of insulin stat and thirty units one hour later.

Insulin units V were ordered t. i. d. with three ounces of orange juice, until the sugar disappeared from the urine.

After the administration of forty-five units with an elapsed time of six hours her drowsiness was less and she could be aroused more easily but paid little or no attention to surroundings.

After the administration of fifteen more units of insulin which was thirty hours from the time it was started, she was fully awake, paying attention to spoken words and following objects.

At this time her urine was sugar free so insulin was dropped to units three t. i. d.

A diet of 30-30-50 was prescribed F. A. glucose ratio 1.05 and insulin units three t. i. d.

On this diet and insulin she remained sugar free, so two days later insulin was lowered to units two t. i. d.

In very young diabetes insulin dosage is governed by two methods—micro method for blood sugar determination or amount of sugar in the urine. We chose the latter because a child maintains a fairly even threshold of 150-160 before sugar appears in the urine.

The child became stabilized on diet of 30-30-50, insulin units two t. i. d. At no time during her stabilization did she experience an insulin shock or even slight perspiration. Urine continually remained sugar free so now surgical consultation was sought. Repair of cleft palate and tonsillectomy had to be done, so tonsillectomy was agreed upon to be done first.

Tonsillectomy was done September 2, 1930, with ether anesthesia and while anesthetized a sterile tube was inserted through the nose and introduced into the stomach and remained there two days so the child could be fed liquid diet,

or medication administered should an emergency arise.

Sugar appeared in the urine for four consecutive days following operation. Amounts varied between 0.95 to 1.15 grams so insulin was left at units two t. i. d.

Recovery was rapid and uneventful.

September 24, 1930, just three weeks following tonsillectomy under ether anesthesia, the patient's cleft palate was repaired. Again while she was anesthetized a sterile tube was inserted through the nose and introduced into her stomach.

Recovery was rapid and at no time during her convalescence did she show sugar in her urine.

Diet now 35-35-55 and insulin *2-2-2*, and urine is still sugar free. Patient ready to go home.

Very young diabetic children can undergo major surgical operations by carefully managing their diabetes and at the time of operation inserting a tube directly into their stomachs either through nose or mouth; tube to remain in child's stomach for two or three days so the patient can be fed liquid diets or medication should the emergency arise.

EFFECT OF THE COMPLETE REMOVAL OF THE SYMPATHETIC CHAINS

Paul Harmon, M.D.

I want to review some work that was done by Dr. Cannon, of the Department of Physiology, in the Harvard Medical School, or rather by Dr. Cannon and his associates*, because several investigators were concerned in this particular piece of research. This research was the outgrowth of another study. Dr. Cannon and his associates were interested in attempting to totally denervate the hearts of cats, and allow the animals to survive. It was found, however, to be much more difficult than anticipated because after division of the vagi nerves and the removal of the sympathetic chains in the chest, and the denervation of the adrenals and liver, it was still found that upon excitement the animal's heart rate would increase. So there was an unknown accelerating factor, and in the attempt to locate this unknown accelerating factor, more and more of the sympathetic chains were removed until finally the chains were completely removed and this extremely interesting animal was produced.

The operations used to completely remove the sympathetic chains differ quite considerably, but they really divide themselves into two. I might say that cats were the animals used principally, although some dogs were operated on, and also six monkeys because they were interested of course in the upright animal in this connection.

One type of operation was first the removal of the cervical sympathetic on both sides. Time was allowed for recovery and then the abdominal sympathetics were removed in part, leaving one splanchnic; in the third stage the thoracic sympathetic chains and the remaining splanchnic and the semilunar ganglia were removed. I think the leaving of one splanchnic intact until there is time for adjustment of the circulation in the abdomen is quite important. This method was very good except that it was found, since the chain was removed first in the thorax and then the abdomen, that, due to scar tissue forming, there was sometimes a small piece of chain left where it went through the diaphragm. This could be easily detected because when the cat was exposed to cold, or when it was frightened by a dog, a small tuft of hair would raise on its back, indicating innervation by the pilomotors in this region. So finally for cats this second operation was adopted. It was a two-stage operation. In the first operation the chain on one side was removed. This was accomplished by opening the chest, cutting the chain just above the stellate ganglion, dissecting it loose and freeing it down to the diaphragm. It was necessary to make two openings in the chest, one between the fifth and sixth ribs and the other between the ninth and tenth. After this dissection was finished and the chest sewed up the abdomen was opened and the chain dissected free in this region. Then the thoracic chain was pulled through the diaphragm and the whole sympathetic chain removed intact. After allowing two or three weeks for recovery the other chain was removed. You will note that in this operation the cervical sympathetics were not disturbed but since they had no connection with the spinal cord they were functionless.

Although it has been reported at various times that removal of certain portions of the sympathetic nervous system was fatal these animals survived and remained perfectly normal to the casual observer in every respect. They could not be told from normal animals. They lived as long as a year before they were sacrificed for postmortem examination. The same thing was true of the dogs and monkeys, although of course there were not so many experiments on these animals. We may conclude, then, that the sympathetic is not necessary for life under laboratory conditions.

The effect of removal of the sympathetic upon growth and development was tested. In two kittens the sympathetic chain was removed on one side when they were about five weeks old. After complete unilateral removal the animals were allowed to live until they were five months old. During that time their growth was perfectly normal. Upon being sacrificed certain organs were examined as to weight on the two sides, such as the kidneys, adrenals and thyroids, and it was found that there was no constant difference in the relative weights of these organs on the normal and sympathectomized side. Of course this experiment is not conclusive, but it would seem to show that sympathectomy does not interfere with growth and development.

*Cannon, Newton, Bright, Menkin and Moore. American Journal Physiol. 1929, 89, 84.

One of the female cats conceived after the total removal of the sympathetic and gave birth to two normal kittens. She nursed and cared for them as a normal cat would.

So far as emotional reactions were concerned there was no apparent difference from the normal animal. Anger and fear could be aroused, by a barking dog for instance, as in a normal cat. However, since the pilomotors were not functioning, there was no erection of hair on the body. The observation that emotional states could be aroused is of particular interest to the psychologist because of its bearing on the James-Long theory of emotions. This theory states, in essence, that after perception of an object by the cerebral cortex, impulses may travel to the viscera and other organs; the disturbance produced by these impulses results in afferent impulses to the cerebrum and the emotion results. The proof that the emotion depends upon the backflow of impulses from the periphery is that in emotional states we are conscious of the "throbs, flushes, pangs" and if these symptoms were removed the emotion could not exist. As is known from other physiological evidence the sympathetic nervous system is the one which discharges during emotional states, as shown by the erection of the hair, dilatation of the pupil, vascular changes, rapid heart beat, secretion of adrenine, etc. With this system removed it would seem that most of the peripheral changes which might result in backflow of impulses to the cortex would be eliminated.

Although emotional states are easily aroused, certain bodily changes which accompany them do not occur in these animals. If a normal cat is made angry by tying it on its back, the blood sugar increases about thirty per cent, the exact percentage increase depending upon the amount of activity. In the sympathectomized animals, on the contrary, the same manipulations leave the blood sugar relatively unaffected. The percentage amount may drop slightly or it may increase, but not over five per cent in either direction. Attempts were made to determine blood pressure during rest and during excitement, but because resting blood pressure is difficult to determine in the cat the results were rather inconclusive. However, the results which were obtained seemed to indicate that blood pressure during excitement is not nearly so high as in normal animals. In the normal animal emotional states produce a polycythemia. This is due chiefly to the contraction of the spleen which throws a large number of red corpuscles into the circulation. This does not occur in the sympathectomized animal because the sympathetic innervation to the spleen has been removed.

The sympathectomized animals could always be distinguished from the normal animals by their location in the animal room. They were always on the radiator and never came down except when they were fed. This we would expect because the heat regulation mechanism must be impaired. Thus with the sympathetics removed there can be no erection of hair and no constriction of the skin vessels to regulate heat loss. This inability to adapt heat loss to the external temperature was shown further by the fact that when the cats were placed in a cold room, near zero degrees centigrade, their rectal temperature dropped markedly, much more than in normal animals, they began to shiver sooner and shivered more violently than normal animals. Apparently these animals can maintain their body temperature only by producing more heat (shivering).

The basal metabolism of the sympathectomized animals was tested. This, as you can imagine, is rather difficult to do in a cat. However, rather extensive studies were successfully made on six animals. There was surprisingly little change in the basal metabolism. In most cases there was a slight drop from normal, but in no animal was the decrease over ten per cent. This would seem to indicate that, although the sympathetic system plays an important part in regulating heat loss, it has very little or no control over basal heat production.

There was no oedema or ulceration of the skin in these animals; in fact, there was no change whatever; the skin was normal. They were not prone to infection. They had snuffles like all cats, but it cleared up promptly as in normal cats, and the mortality was no higher. Their dispositions were unchanged by this operation.

It must be clearly understood that the word "sympathetic" as used in this paper refers only to the thoraco-lumbar division of the autonomic nervous system. The craniosacral division of the autonomic was not disturbed. The authors call attention to the fact that in the recent medical literature many references are made to "vagotonic" and "sympathicotonic" states or to "autonomic imbalance." The idea is that every organ is controlled by these two sets of nerves (craniosacral and sympathetic) acting in apposition to each other; the normal activity of the organ depending upon the proper balance of the tonic action of these two systems. When this equilibrium is disturbed vagotonia or sympathicotonia result depending upon which system has gained the upper hand; along with this imbalance certain pathological changes occur. Of course, in the first place, not all organs are oppositely controlled by the two systems and in the second place although the sympathectomized cat gives a perfect example of autonomic imbalance (vagotonia) it is changed but little from the normal. Although immediately following the operation there is evidence of heightened cranio-sacral activity, as for example marked constriction of the pupils, these symptoms soon disappear. At no time are definite pathological symptoms present.

Since such slight bodily disturbance results from removal of the sympathetic, one wonders if it is of any great importance to the body. The authors of this article think of the sympathetic

as a very important system but one which is vital to the animal only in emergencies or more broadly, that it is the principle mechanism by which the internal organization of the animal is adapted to its external environment. In the laboratory the sympathectomized animal can survive because his environment is regulated for him—the room temperature is maintained at a rather constant level and abundant food is supplied him. Thrown upon his own resources, the sympathectomized animal would be considerably handicapped. His body temperature could not be maintained at low environmental temperatures. If vigorous effort were necessary to obtain food, to escape or fight an enemy he would have no splanchnic vasoconstriction which would shift blood to the muscles where it was needed; the output of blood from the heart would be curtailed; there would be no increase in the secretion of adrenin; no increase in blood sugar; no increase in the number of red corpuscles. In other words the agencies, which, through their correlated activities, unite to adapt the oxygen and food supply of the muscles to the severity of the effort, would not be operating. The sympathectomized animal, then, would be inefficient. Certainly in combat or in competition with normal animals he would be distinctly handicapped, and if there were any question of who would get the food or win the battle, he would be the loser.

PRELIMINARY REPORT ON MEETING OF AMERICAN ASSOCIATION OF MEDICAL COLLEGES

B. D. Myers, M.D.

The meeting at Denver of the Association of American Medical Colleges was attended by the representatives of sixty-three of the eighty medical schools in the United States and Canada. The program extends through the greater part of three days and is very carefully made up of medical school problems presented by way of formal papers and then discussed by those present.

One of the papers presented was by one of the University of Colorado men, who explained the working of their psychiatric hospital in connection with their medical school. I do not want to go into details on that, but a feature that was interesting to me and to many there was the fact that they have their child guidance clinic in connection with this psychiatric institute.

Another of the Colorado men presented a statement of the plan of admission of medical students at the University of Colorado. That plan does not differ so greatly from our own as to make a detailed statement desirable.

That paper was followed by one on "Aptitude Tests" by a man named Moss, reporting for Torald Sollmann of Western Reserve, whom most of you know. All of you sophomores had that test last year and it was given in the majority of medical schools. Then at the close of the year all of the medical schools reported to a committee that was making this study, two things. They reported first the scholarship of the student at the time of his admission to the school of medicine; they also reported on the scholarship rating of the student during his freshman year in the medical school. Then there was a determination of the correlation between this aptitude test and two other ratings, namely, the scholarship in the pre-medical years and that in the freshman year of medicine. The findings were about as follows: The very superior men as determined by the aptitude test were the superior men as determined by the pre-medical rating and also by the record of the freshman year. Nearly all the poor men as determined by the aptitude test were also the poor men as determined by the pre-medical record and the freshman year record. However, it was found that if this aptitude test had been used alone as the basis of admission, while it would have eliminated a great number, perhaps sixty per cent, of those who failed during their freshman year, it would also have eliminated a certain percentage of men who did fairly well during their freshman year, so as a basis of admission it is not sufficiently developed to be trustworthy.

There was a paper presented by the Associate Dean of the University of Pennsylvania on the cultural courses in pre-medical education; and Lyons of Minnesota presented a paper on the cultural elements of the medical course. I was very glad to hear these papers because for many years I have had the conviction that of all individuals graduated by a university there was no group that had a better chance to become cultured individuals if they took advantage of their opportunities than the doctor of medicine. Why do I say that, and why was that the conclusion of this paper? First of all, we cannot define culture, and I will not attempt it, but if you go to any university on this continent—and by that I mean Canadian universities as well as American—they will tell you that certain courses are cultural courses. And what are those courses? One of them is psychology. Now no man can become a doctor of medicine without becoming something of a psychologist, and therefore we require a course in psychology as a part of our pre-medical training. Philosophy is another cultural course, and I am certain that every medical man must become something of a philosopher at some time during his life. Dr. Wilson of the Mayo Clinic made the interesting observation that in his judgment he doubted if anybody became a cultured individual before thirty. So you young people need not despair. History is one of the courses spoken of in every university as a cultural course. Much emphasis is laid on this subject, and in most institutions they deplore the idea of students graduating without a foundation of that cultural course. Certainly in our school the student must know something of the history of medicine, and I do not know of any brand of history that gives a

man as fine a conception of human development as the history of medicine—or the history of nursing for that matter. You learn better how people thought when you know that 1,800 years ago the nurse who would have appeared in a clean uniform would have been condemned. At that time a nurse was commended for the slovenliness of her garb. Sociology is mentioned as a cultural course, and every doctor of medicine must become something of a sociologist.

The relation of the medical school to the state board was presented by Dr. Harrold Rypins, secretary of the New York State Board of Medical Examiners. The Association went on record as accepting the challenge of the board to the effect that the Association of American Medical Colleges should be the standard-maker of premedical requirements. And that means simply this: that when this scheme finally gets into operation the fact that you are a graduate of a school holding membership in the Association of American Medical Colleges is *prima facie* evidence that you have the requirements for premedical education. In order to make good on that it involves certain activity on the part of the Association of American Medical Colleges, namely, the necessity of the Association keeping in very close touch with the medical schools so that unfortunate situations do not develop in these schools without knowledge of the Association. In other words, if the Association puts its stamp on a certain school as meeting certain requirements, then it must be certain that the school does meet those requirements.

One of the most interesting papers presented was by Doctor Bass, of Tulane University at New Orleans. He showed drawings of the new nine-story clinical building at that university. Of course they have a good deal of space devoted to tropical diseases, which they have so much opportunity to study at New Orleans, but the thing that interested me particularly was the space devoted to oral surgery and oral hygiene, which very definitely, so far as Tulane is concerned, will be removed from the field of dental education and placed where it seems to me it rightfully belongs, in the field of medical education.

SPECIAL ARTICLES

THE PRESIDENT'S GREETINGS

To the Members of the Indiana State Medical Association:

I wish to express to you, the members of the Indiana State Medical Association, my profound appreciation of the honor you have conferred upon me, and may the year 1931 bring to each and every one of you happiness, good cheer and contentment.

Notwithstanding the present financial depression that confronts the entire country, I am pleased to report to you that your Indiana State Medical Association is in a most healthy and prosperous condition, both as to its finances and its membership. Its high standard of work and achievement equals that of many state medical associations, and yet the annual dues and expenditures necessary for its maintenance are much less than those of many similar state organizations.

I desire at this particular time to pay my personal tribute to my predecessors, and the members of the various committees who have so generously and unselfishly contributed of their valuable time, thought, and labor to the maintenance and advancement of our Association's interests. As a result of their labors every member well can feel proud and honored to have his or her name on our Association roster.

Our watchword has been "Progress," and while much that implies advancement has been accomplished it is most essential that we be not content with that already attained. To be content and rest upon our laurels at the present time when numerous and various problems of vital importance to the medical profession demand our time and study for satisfactory solution must of necessity imply a cessation of medical progress. However, if there ever was a time for concerted action on the part of the members of the Indiana State Medical Association that time is the present. Petty jealousies and unjustified dissensions should be cast aside. The solution of the medical problems, some of them menacing to progress, that are appearing on the medical horizon, is not the work of any one man or group of men selected to represent you, but the work of the entire membership of the Association. Heretofore this work has been accomplished and creditably so by small groups of men appointed in due form by our Association. These same groups or committees will continue to give of their time and earnest effort to the problems that confront us, and to all work pertaining to medical advancement, but they need the encouragement and support of the individual members of our Association. Experience has taught that the accomplishment of any work or the solution of any important problem is best obtained by a small group or committee. However, if it were possible to secure the concerted action of all, or even a majority of our members; if we could organize a brigade or division of such members who would be sufficiently interested in aiding the various committees in their work, the end result would be more rapid, and there would result a happier and more contented medical profession in the state of Indiana.

Every member of the Indiana State Medical Association should have a keen interest in his local, district and state medical society. This should suggest a medical Utopia, and where this is a possibility medical problems of vital importance will prove very easy of solution. I realize that such a state in the medical profession is not obtainable, and yet with an increased activity on the part of a large percentage of our members the

solution of many problems that demand much time, thought and study would be facilitated and made much easier for the various committees that represent your medical interests. It was, I believe, Patrick Henry, who said, "Eternal vigilance is the price of liberty." State medicine is regarded by many as one of the current menaces to the medical profession. The Harrison Act, the Sheppard-Towner Act and the Volstead Act also are regarded by not a few as medical menaces. Other problems, such as child health and protection, the relations between the State Board of Health and the State Medical Association, the caring for the cases of tuberculosis in our state, etc., all should be given due consideration by the Indiana State Medical Association. Cooperation of our Association with the various organizations that are sincere in their efforts in relieving human misery and suffering within the boundaries of our state is indicated.

The Indiana State Legislature convened this month. It is quite probable that several bills pertaining to the medical practice act and health legislation will be presented. The State Medical Association has a most competent committee on public policy and legislation. This committee has been quite active in the past, and very efficient results have been obtained. During the present session of the legislature the members of the committee will continue to give their valuable time in an effort to promote medical progress and frustrate nefarious medical legislation. If each and every member of the Indiana State Medical Association will make the individual effort to see and talk with the representative and the senator of his district, and inform that representative and that senator concerning the good or evil that exists in any bill pertaining to medicine or medical practice that is presented for consideration, such a concerted policy on the part of our members undoubtedly would result in the enactment of not only satisfactory but progressive medical legislation. I would urge every member to take his part in this most important work. It should be remembered that what benefits the profession as a whole benefits the individual members thereof and, accordingly, every member of our Association should put forth an earnest effort to promote the welfare of all.

A. B. GRAHAM, M.D.,
Indianapolis, Indiana.

THE WOMAN'S AUXILIARY

(The President's Greetings to the Members of the Woman's Auxiliary of the Indiana State Medical Association)

In presenting my New Year's message I wish to extend to each individual Auxiliary member, as well as all the physicians' wives, whom we hope to enlist as members, my best wishes for a happy, healthy, prosperous New Year. On behalf of the Woman's Auxiliary, I wish to extend our heartiest greetings to all members of the Indiana State Medical Association. We wish to express our sincere appreciation of the generous words of indorsement we have received from so many of the officers, members, the editor of THE JOURNAL, and other leading medical men. Their encouragement and support will aid greatly in the development of our work.

The principal function of the Woman's Auxiliary is education of the public in health matters, but physicians' wives cannot educate others until they have first educated themselves. The first year of every Auxiliary's existence could be devoted profitably to the education of its own members. The best field for work is the women's clubs. Physicians' wives should be willing to accept offices in such organizations as the Federated Clubs and Parent-teacher Associations in order to carry on health educational work with the members of these organizations and through them to teach the public.

Doctor Bulson, editor of THE JOURNAL, gave a most helpful and instructive talk to the Woman's Auxiliary at the last state meeting held in Fort Wayne, stressing the importance of more constructive work on the part of the Auxiliary. A copy of this address will be forwarded soon to each county president. Many and varied programs are to be found, as outlined by Doctor Bulson, so that any group can find a plan to suit its needs.

Physicians' wives hold an enviable position in being privileged to have a part in this great "world-wide health program" and I would urge every physician's wife to lend her influence to bring before other women dependable knowledge and a just appreciation of the real spirit and purpose and actual achievements of the medical profession. I earnestly solicit the interest and cooperation of all women who are wives of physicians in this work of unselfish service, that in the coming year we may carry a real message to every club in our state; and I believe that with the united efforts of such a splendid body of earnest, devoted, intelligent women as comprise the membership of the Woman's Auxiliary to the Indiana State Medical Association, we shall be successful.

I trust that in coming together socially in our county and state units we shall learn to know and love each other, have faith in each other, and faith in our organization. May the good work initiated by the Auxiliary, and so ably promoted by its past officers, continue and be extended into full usefulness.

MRS. WILLIAM S. TOMLIN,
January 1, 1931. Indianapolis.

THE HEALTH OFFICER BILL

(Text of the All-time Health Officer Bill Introduced in the 1931 Session of the Indiana State Legislature)

A BILL FOR AN ACT to enable counties, certain cities and districts composed of counties, to establish and maintain full-time health departments, providing for the appointment of county,

city and district health councils and county, city and district health commissioners, prescribing their rights, powers and duties and the rights, powers and duties of certain officers in connection therewith and other matters properly related thereto.

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF INDIANA, That, subject to the provisions of this act a county health council may be appointed in any county in this state. The board of commissioners of any county is hereby authorized, on its own initiative, or upon the presentation to such board of commissioners of a petition signed by any number of resident freeholders of such county more than ten percent (10%) of the whole number thereof, except freeholders resident of an incorporated city having a population of more than fifty thousand (50,000) within such county, to appoint a county health council, whenever, in its discretion, such board shall deem such appointment to be necessary and proper. If a petition, signed by fifteen percent (15%) or more of the freeholders of such county, except freeholders resident of an incorporated city having a population of more than fifty thousand (50,000) within such county, shall be presented to such board of commissioners, such board shall thereupon appoint a county health council.

SECTION 2. The county health council so appointed shall consist of five (5) members, resident of such county, at least two (2) of whom shall be regularly qualified and licensed physicians, and not more than three (3) of whom shall belong to any one political party. In the first instance, two (2) members of such council shall be appointed for terms of two (2) years and three (3) members shall be appointed for terms of four (4) years. Thereafter all members shall be appointed for terms of four (4) years. In every case the members of such council shall be appointed for the terms herein designated and until their successors shall have been appointed and qualified. All vacancies occurring in the membership of the council shall be filled by appointment by the board of commissioners for the unexpired term. The compensation of the respective members of the county health council shall be five dollars ($5.00) per day for each and every day or fraction thereof necessarily engaged in the transaction of the duties of such council. The county health council shall hold four (4) regular meetings each year, at such times as the council shall determine, and may hold such special meetings as may be deemed necessary in the interests of the public health and the public welfare of the people of the county. All special meetings shall be called by the county health commissioner. The first meeting of the county health council shall be held within thirty (30) days after the appointments shall have been made, on call of the auditor of the county.

SECTION 3. It shall be the duty of the county health council to appoint a county health commissioner, who shall be, ex-officio, the executive secretary of the county health council and the administrative health officer of the county. All county health commissioners shall be appointed for terms of four (4) years. No person shall be appointed as county health commissioner by the county health council of any county, under the provisions of this act, unless such person so appointed shall have a degree and a diploma from a medical school of recognized standing, shall be well versed in hygiene, sanitary science and public health administration, shall be able-bodied and of good moral character and shall be recommended and approved by the State Board of Health. The salary to be paid the county health commissioner shall be determined by the county health council and shall in all cases be an adequate living salary, but in no case to exceed five thousand dollars ($5,000) per annum. Such county health commissioner shall devote full time to the performance of his duties and shall not engage actively in any other business or occupation during the time when he serves as county health commissioner.

SECTION 4. In addition to appointing and fixing the salary of the county health commissioner, it shall be the duty of the county health council to act in an advisory capacity to the county health commissioner. It shall meet as provided by law for the purpose of advising with the county health commissioner in matters pertaining to the public health of the county, the employment and appointment of sanitary and other inspectors, public health nurses, office and clerical assistants, the expenditure of appropriations for public health purposes, and the development and adoption of policies and programs for carrying out and administering the public health work of the county.

SECTION 5. The county health commissioner is hereby authorized to appoint and fix the compensation of such sanitary and other inspectors, public health nurses, office and clerical assistants as may be deemed necessary to carry on the public health work of the county as contemplated in this act. The county health commissioner may discharge any such employee for incompetence, neglect of duty or other just cause.

SECTION 6. In addition to the salaries paid to the county health commissioner and to his necessary assistants and employees, as herein provided, all necessary office expenses and the necessary traveling expense of the county health commissioner and his assistants and employees, while engaged in the performance of their duties as such, shall be paid out of county appropriations for public health work.

SECTION 7. The common council of any city having a population of fifty thousand (50,000) or more according to the last preceding United States Census, may provide, by ordinance, for the appointment, by the mayor, of a city health council for such city. The city health council so appointed

shall consist of five (5) members, resident of such city, at least two (2) of whom shall be regularly qualified and licensed physicians, and not more than three (3) of whom shall belong to any one political party. In the first instance, two (2) members of such council shall be appointed for terms of two (2) years and three (3) members shall be appointed for terms of four (4) years. Thereafter all members shall be appointed for terms of four (4) years. In every case the members of such council shall be appointed for the terms herein designated and until their successors shall have been appointed and qualified. All vacancies occurring in the membership of the council shall be filled by appointment by the mayor for the unexpired term. The compensation of the respective members of the city health council shall be five dollars ($5.00) per day for each day or fraction thereof when necessarily engaged in the transactions of the duties of such council. The city health council shall hold one (1) regular meeting each month, at such times as the council shall determine, and may hold such special meetings as may be deemed necessary in the interest of the public health and the public welfare of the people of city. All special meetings shall be called by the city health commissioner. The first meeting of the city health council shall be held within thirty (30) days after the appointments shall have been made, on call of the mayor.

SECTION 8. It shall be the duty of the city health council to appoint a city health commissioner, who shall be, ex-officio, the executive secretary of the city health council and the health officer of such city. All city health commissioners shall be appointed for terms of four (4) years. No person shall be appointed as city health commissioner unless such person so appointed shall have a degree and diploma from a medical school of recognized standing, shall be well versed in hygiene, sanitary science and public health administration, and shall be able-bodied and of good moral character. The salary to be paid the city health commissioner shall be determined by the city health council subject to the approval of the mayor. Such salary shall in all cases be an adequate living salary, but shall in no case exceed the sum of five thousand dollars ($5,000) per annum. Every city health commissioner shall devote all of his time to the performance of his duties and shall not engage actively in any other business or occupation during the time when he serves as city health commissioner.

SECTION 9. In addition to appointing and fixing the salary of the city health commissioner, it shall be the duty of the city health council to act in an advisory capacity to the city health commissioner. It shall meet as provided by law for the purpose of advising with the city health commissioner in matters pertaining to the public health of the city, the employment and appointment of sanitary and other inspectors, public health nurses, office and clerical assistants, the expenditure of appropriations for public health purposes, and the development and adoption of policies and programs for carrying out and administering the public health work of the city.

SECTION 10. The city health commissioner is hereby authorized to appoint and fix the compensation of such sanitary and other inspectors, public health nurses, office and clerical assistants as may be deemed necessary to carry on the public health work of the city as contemplated in this act. The city health commissioner may discharge any such employee for incompetence, neglect of duty or other just cause.

SECTION 11. In addition to the salaries paid to the city health commissioner and to his necessary assistants and employees, as herein provided, all necessary office and traveling expenses of the health commissioner and his necessary assistants and employees, while engaged in the performance of their duties as such, shall be paid out of city appropriations for public health work.

SECTION 12. It shall be the duty of county and city health commissioners, under the provisions of this act, within their respective jurisdictions, to enforce the health laws of the state, the health ordinances of cities, and the orders and rules of the State Board of Health; to collect, record, compile and report the vital statistics of their respective jurisdictions; to keep full and permanent records of their public health work; to keep minutes of all meetings of their respective councils; to have immediate control and direction of all office employees, of all sanitary and other inspectors, sanitary police officers, and all public health nurses employed by them; to have charge of the municipal or county lavoratories; to have charge of meat, dairy and food inspection, of sanitary plumbing and sanitary house inspection, of quarantine and the control and prevention of communicable disease and in all reasonable and necessary ways to protect and promote the public health.

SECTION 13. County and city health commissioners, under the provisions of this act, shall have power to make sanitary inspections and surveys of all public buildings and institutions; to enter upon and inspect private property at proper times in regard to the probable presence, source and cause of disease and in regard to conditions that may constitute a menace to public health; to close schools, churches and other places of business or assemblage and to forbid public gatherings, when necessary to prevent and control communicable disease; and to order and require whatever may be reasonable and necessary to protect and promote the public health within their respective jurisdictions.

SECTION 14. Where full-time county or city health units are established, as provided in this act, the county council of such county and the common council of such city, as the case may be, shall annually make the appropriations necessary to carry out the provisions of this act, within such county or city, to provide for necessary office help,

assistants, public health nurses, sanitary and other inspectors, traveling and other expenses, and for carrying on an adequate program of public health protection and promotion within such county or city. Such appropriations shall not in any one year exceed one dollar ($1.00) per capita on the population of such county or city. The population of counties and cities for the purpose of this act shall be determined by the method of the United States Bureau of the Census.

SECTION 15. When the board of commissioners of any county shall avail itself of the provisions of this act by appointing a county health council, and when the county health council shall elect a county health commissioner, the term of office of the county health commissioner of such county, and the term of office of the members of the board of health and the health officer of every incorporated city in such county except cities having a population of more than fifty thousand (50,000), and the term of office of the health officer of every incorporated town in such county, as provided in Chapter 144, Acts 1909, shall terminate and the office of county health commissioner, the office of members of the board of health and secretary of the board of health in each incorporated city, except cities having a population of more than fifty thousand (50,000) and the office of secretary and town health officer in each incorporated town, within such county, as provided in Chapter 144, Acts 1909, shall, by virtue of the appointment of a county health commissioner, as provided for in this act, be *ipso facto* abolished. Upon the appointment of a county health commissioner in any county under the provisions of this act, all of the rights, powers and duties now conferred by law upon the health commissioner of such county and upon the health officer of every city therein, except cities having a population of more than fifty thousand (50,000), and upon the health officer of every incorporated town in such county, shall devolve upon and be held, possessed and exercised by such or any such county health commissioner appointed under the provisions of this act. When the common council of any city shall avail itself of the provisions of this act, and shall provide for the appointment of a city health council, and when the city health council shall elect a city health commissioner, the term of office of members of the city board of health and of the secretary of the city board of health of such city, as provided in Chapter 144, Acts 1909, shall terminate, and the office of members of the city board of health and of the secretary of the city board of health within such city, by virtue of the appointment of a city health commissioner, as provided for in this act, shall be, *ipso facto,* abolished.

SECTION 16. Where any county is unable to have a full-time department of health, as provided in this act, by reason of lack of population or lack of finance such county may join with one or more contiguous county or counties to form a health district provided that not more than five (5) such contiguous counties may be formed into such health district and provided that the formation of such health district and any such health district must be approved by the State Board of Health. Such joint health district may be formed upon favorable action by a majority of the board of county commissioners of such county to be included in such district, in the manner provided in section one (1) of this act, namely, on the initiative of such boards of county commissioners, acting jointly, without petition, or upon petition of any number more than ten percent (10%) of the resident freeholders of each county to be included in such district; and the boards of county commissioners of the several counties constituting such district shall establish such district upon petition of fifteen percent (15%) or more of the resident freeholders of each county in such proposed district.

SECTION 17. The district health council for such health district shall consist of two (2) members from each county composing the district to be appointed by the board of county commissioners of each county. One (1) member from each county shall be appointed for a term of two (2) years and one (1) member for a term of four (4) years in the first instance and thereafter each such member shall be appointed for a term of four (4) years and until his successor has been appointed and qualified. All vacancies occurring in such district council shall be filled by appointment by the board of county commissioners for the unexpired term. The first appointments to such district health council shall be made within thirty (30) days from the date of approval of the formation of such joint county health district by the State Board of Health and the State Board of Health shall designate the time and place for the first meeting of such district health council. Not more than one (1) member of such district health council from each county shall belong to one political party and at least one (1) such member from each county shall be a regularly qualified and licensed physician.

SECTION 18. The duties of the district health council shall be for the health district the same as the duties of the county health council for the county, as provided in this act, and the compensation of members of the district health council shall be the same as that of members of the county health council as provided in this act. The duties of the district health commissioner, appointed by the district health council, shall be for the health district the same as the duties of the county health commissioner for the county as provided in this act and the duties and relations of all officials, county and state, and of all employees, appointees and assistants shall be in relation to the health department the same as is provided for the county in this act the same as though the word "district" were used where the word "county" appears in this act except that necessary appropriations as provided for in this act shall for the district be made by the county council of each county of the

district in the proportion that the total population of each such county bears to the total population of the district, the population to be determined as that of the last preceding United States Census. The State Board of Health shall determine and designate where the principal office and headquarters of the health commissioner shall be located and maintained within the district.

SECTION 19. When the boards of county commissioners of two or more contiguous counties shall establish a joint county health district, as provided in this act, and when the district health council shall elect a district health commissioner, the term of office of the county health commissioner of each such county, and the term of office of the members of the board of health and the health officer of each and every incorporated city in such counties, except cities having a population of more than fifty thousand (50,000), and the term of office of the health officer of each and every incorporated town in such counties, as provided in Chapter 144, Acts 1909, shall terminate, and the office of county health commissioner, the office of members of the board of health and secretary of the board of health in each incorporated city, except cities having a population of more than fifty thousand (50,000), and the office of town health officer in each incorporated town within each such county, as provided in Chapter 144, Acts 1909, shall, by virtue of the appointment of a district health commissioner, as provided for in this act, be, *ipso facto*, abolished. Upon the appointment of a district health commissioner under the provisions of this act all of the rights, powers and duties now conferred by law upon the health commissioner of each county within such district and upon the health officer of every city therein, except cities having a population of fifty thousand (50,000), and upon the health officer of every incorporated town therein, shall devolve upon and be held, possessed and exercised by such district health commissioner under the provisions of this act.

SECTION 20. The State Board of Health shall have and exercise general supervision, direction and jurisdiction over and shall cooperate with, full-time county, city and district health departments as provided for in this act to the end that there shall be a unified, administrative health program for the entire state as may be best suited to the health needs of the state and as may best meet the responsibility of the State Board of Health for the protection and promotion of the health and life of the citizens of the state.

SECTION 21. All salaries, compensation and other expense legally incurred in carrying out the provisions of this act shall be paid in the same manner as is now provided by law for the payment of salaries, compensation and other expenses due and owing to and incurred by other county or city officials and departments, as the case may be.

SECTION 22. Nothing in this act shall be construed as limiting the right of any citizen, or the authority of a parent or guardian or person standing *in loco parentis*, to determine what treatment or correction shall be provided for himself, his family or for a minor child, and the agency or agencies to be employed for such purposes.

SECTION 23. Any person or officer who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not less than ten dollars ($10.00) nor more than one hundred dollars ($100.00).

SECTION 24. Nothing contained in this act shall be construed to apply to any city of the first class at the time of the passage of this act. This act shall not be construed as repealing any law relative to public health, but shall be construed as supplemental thereto, and as affording an alternative method of providing an agency for the administration of the public health service of counties, cities and towns, except that when any county, city or district shall have availed itself of the provisions of this act, it shall thereafter continue to operate under the provisions of this act, and provided that the proper authorities of any municipality within a county or district are hereby authorized, in their discretion, to make an appropriation for the support and maintenance of such county or district health department as provided for in this act.

SECTION 25. In any county having a city of more than fifty thousand (50,000) population, and in which county the population outside such city does not exceed eight thousand (8,000), and in which such city has established a full-time health department as provided in this act, the proper authorities of such county are hereby authorized, in their discretion, to make an appropriation for the support and maintenance of such full-time city health department as may be deemed necessary to provide an adequate health service for such county, outside such city, through such city health department. Such appropriation and any such appropriation shall be approved by the health council of such city, and when such appropriation is made and approved the provisions of Section fifteen (15) of this act applying to the term of office of the county health commissioner of such county, and the term of office of the health officer of every incorporated town in such county, and the term of office of the members of the Board of Health, and the health officer of every incorporated city in such county, and applying to the rights, powers, and duties of such officers, shall be in force and effect in such county, and the health department of such city having a population of fifty thousand (50,000) or more shall, as provided in this act, become the full-time health department for the entire county.

DIPHTHERIA DEATHS IN 1930 NOVEMBER

Eighteen diphtheria deaths in November makes a total of 117 for the first eleven months of the year. Carroll, Fayette, and Franklin counties entered the black list for the first time. Lake county has four deaths making a total of twenty which is approximately one-sixth of the number for the entire state. Knox county now has a total of nine which is an even higher rate. Knox county had one case reported during November and the last half of October and yet has two deaths. We are strongly inclined to think that some one is not enforcing health laws in Knox county. Marion county had two deaths making a total of fifteen, a rate somewhat higher than the remainder of the state.

Study of the reports of cases reveals three principle foci as follows: (1) Lake county, (2) Marion county, (3) Delaware, Madison and Jay counties and the surrounding areas. A new focus seems to be arising in Dearborn, Fayette and Franklin counties. Only seven cases have been reported and six of those were for the week ending December 6th (only one day in November) and yet three deaths were reported for November. Evidently this is a very virulent infection or else is not being reported. The latter supposition is much more likely.

We are extremely anxious to get the reports for next month inasmuch as the week of December 13th has the most cases reported of any month in the year. Diphtheria is very far from being whipped. It looks as if we may be starting the new year with a rather wide-spread epidemic. The counties mentioned above have a heavy responsibility in the matter of the prevention of diphtheria. We are planning to make a detailed report for the entire state after the records of next month have come in. Some counties are going to have a very black spot on the map. Now is the time to make next year's map different. It can be done.

Diphtheria deaths by counties:

	Total for 1930	*November*		*Total for 1930*	*November*
Allen	2	0	Lawrence	6	0
Carroll	1	1	Madison	2	1
Clark	4	0	Marion	15	2
Clinton	1	0	Miami	1	0
Daviess	1	0	Monroe	5	1
Dearborn	2	1	Montgomery	2	0
Delaware	2	0	Morgan	1	0
Dubois	1	0	Perry	1	0
Elkhart	2	0	Pike	1	0
Fayette	1	1	Porter	1	0
Floyd	1	0	Randolph	1	0
Franklin	1	1	St. Joseph	5	1
Fulton	1	0	Spencer	1	0
Gibson	1	0	Sullivan	2	0
Greene	1	0	Tippecanoe	1	0
Hamilton	1	0	Tipton	2	0
Howard	1	0	Vanderburg	6	1
Jay	2	0	Vigo	3	1
Knox	9	2	Warrick	2	1
Lake	20	4	Wayne	1	0
Laporte	2	0	White	1	0
			Totals	117	18

ABSTRACTS

CLINICAL EVALUATION OF DRUGS

ERNEST E. IRONS, Chicago (*Journal of the A. M. A.*, November 16, 1929), asserts that the first objective in therapeutics is to hold fast to remedies of substantiated and proved value, and to strive to understand and use them better. The information concerning the sources, preparations, uses and doses of drugs, collected in the United States Pharmacopeia, is revised every ten years by the Pharmacopeial Convention, with the omission of those drugs shown by experience to be of relatively little use and the inclusion of new drugs whose value has been established. The second objective, the discovery and evaluation of new drugs and methods of treatment, presents a difficult problem whose solution often requires the effort of many physicians. The final verdict must come from the observation of clinical results, and often can be arrived at only after a period of long and careful study, the duration of which depends largely on the definiteness of effect of the remedy. The clinical value of insulin was established within a year after its discovery. The value of diphtheria antitoxin was indicated relatively soon after discovery, but its complete acceptance required time for the accumulation of statistics. Other remedies for disease, from which much was expected from preliminary reports, sometimes have been studied for years and then found ineffective and discarded. The progressive physician will be alert to secure for his patients the benefit of new discoveries, but he cannot safely allow his hopes to outweigh his judgment. He will pass by those drugs, new or old, which are unpromising and will employ those whose value is supported by well controlled scientific evidence.

DRINKER RESPIRATOR

PHILLIP DRINKER, Boston; THOMAS J. SHAUGHNESSY, New York, and DOUGLAS P. MURPHY, Philadelphia (*Journal A. M. A.*, Oct. 25, 1930), have found by experience that the respirator is effective in cases of acute anterior poliomyelitis, gas poisoning (carbon monoxide), alcoholic coma, drug poisoning (morphine, heroin, barbital) and drowning. There was one postoperative respiratory failure and one failure in asphyxiation of the new-born. In the latter case the child was kept alive but died later of complications. There is a field for the device in the treatment of new-born babies in whom whom respiration is not initiated by the usual means. Contraindications for the use of the respirator are simply those of observing the patient's reaction to the respirator. If the patient is not suffering from respiratory difficulty or is not cyanosed, there is generally no point in using the respirator. If the patient does not respond to the treatment and does not spontaneously breathe in synchronism with the machine, the artificial respiration may actually interfere with his voluntary breathing and certainly does no good. Even in the case of conscious patients who are frightened and apprehensive but badly cyanosed, we have experienced no great difficulty in putting them into the respirator. A patient can be transferred from a bed or stretcher to the respirator very easily in less than one minute by inexperienced persons. In many instances morphine has been given to patients who are already in respiratory difficulty but are apprehensive of the machine and are restless. This treatment has proved effective, especially in poliomyelitis, but obviously it is to be used only when the respirator is immediately available or when the patient has already been placed in it. In the treatment of infants who do not respond to the customary respiratory stimuli at birth, the respirator seems particularly applicable. In such instances the machine must be near at hand, preferably in the delivery room or a room adjoining. A sufficient number of patients have been treated to indicate that, for the new-born, the respirator has a very useful field.

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EDITORIALS

CAUSE OF DEATH FOLLOWING GALL-BLADDER OPERATIONS

It is possible for certain professional people, such as poets and perhaps artists, to dwell in a land of illusions where facts are non-essential. Medical science, however, has come to symbolize all that is exact in the scientific world, so that we must be constantly on the alert lest we fall into the error of making false observations and false conclusions. An autopsy is probably the greatest single factor in dispelling illusions and correcting false conclusions in the field of clinical medicine.

One of the illusions entertained by a good many surgeons which autopsy study is gradually dispelling is that the cause of death following gall-bladder operations is "liver shock," or "liver disfunction," or some obscure disturbance due to unavoidable liver trauma at the time of operation. It is well to remember that any statement as to the cause of death in post-operative gall-bladder cases that is not based on autopsy findings is of doubtful value in determining the actual cause of death. A very instructive article concerning this subject appeared in the *Annals of Surgery*, March, 1930, by Neuhoff, in which a study was made of the cause of death in 800 post-operative cases as shown by autopsy. This cause of death was then checked against the clinical cause as shown by the hospital record. Among other interesting facts developed it was shown that in thirty-three cases, pneumonia had been erroneously diagnosed. Instead of pneumonia the following conditions had been found: Pulmonary embolism, two cases; pulmonary atelectasis, six cases; septicemia, five cases; hemorrhage, one case; empyema, two cases; intraperitoneal abscess, two cases; diffuse suppurative peritonitis, fifteen cases. In this study no mention whatever was made of "liver shock" or "liver disfunction" as a cause of death in gall-bladder cases. There were sixty-four non-suppurative gall-bladder operative deaths, forty-one percent of which was due to infection.

Other studies of similar nature show that death following gall-bladder operations resulted from the same causes that produce death in other intra-abdominal operations, such as infection, hemorrhage, pneumonia, etc., and infection leads all other causes. An intensive study of the nature and cause of this high incidence of infection offers the greatest hope in reducing gall-bladder mortality.

These facts are at the same time both a warning and an encouragement—a warning to those surgeons who thoughtlessly ascribe their mortality in gall-bladder cases to a more or less unavoidable and obscure liver disfunction, and an encouragement to those surgeons who in possession of the facts proceed to eliminate those faults in technique which may have been responsible for the trouble.

THE SIGNS OF THE TIMES

There has just come to our desk the report of the Indiana Tuberculosis Commission appointed by Governor Leslie for the purpose of looking into the tuberculosis situation in order that proper recommendations may be made to the next legislature concerning the need for additional sanatoria for the care of the tuberculous. We do not at this time wish to discuss the merits of the report, but merely to call attention to the personnel and to the attitude taken toward the medical profession.

Tuberculosis used to be a medical problem and it might seem to the uninitiated that it is still such, but evidently it is not. Six men and women make up the commission as appointed by the governor and not one of them is a physician. Furthermore, in the entire report there is mention of but two physicians and they are engaged in institutional tuberculosis work in an eastern state. We may well ask whether there is a reason why there was no consideration given to the profession that has done far more than any other to put the white plague where it is today. (We recently have heard a worker in the Anti-tuberculosis League imply that the cause for the recent decline in rates is due to the efforts of that society when as a matter of fact tuberculosis was declining during the entire century prior to the organization of the first society.) The Anti-tuberculosis society is doing excellent service, but is doing work that should be under the control of the medical profession for the very simple reason that tuberculosis is a medical problem. As a matter of fact it is managed almost entirely by laymen for the reason that physicians have not been willing to give it time and thought. Now the physician finds himself nosed out, and has no one to blame but himself. If the state has gone into state medicine in the treatment of tuberculosis, is it not simply because the physicians have stood by while laymen took charge of work that was originally medical and still should be so?

Interesting in the report is the fact that *laymen* decided that there should be several sanatoria, and for the reason that tuberculosis patients do not respond well to treatment if they must go far from

home; that "no sanatorium of less than fifty beds can be efficiently operated"; that *laymen* have made a recommendation covering the expenditure of a very large sum of money to care for a *medical* problem, and that in conclusion the commission thanks the governor, the boards of trustees and superintendents of the sanatoria in the state, the representatives of the tuberculosis associations, other agencies and other representative citizens for their cooperation. Apparently they have not seen fit to use the services of the medical profession—or maybe the medical profession wasn't interested.

An interesting paragraph is quoted, "It is quite evident that there is no definite plan for those suffering from tuberculosis. Some institutions have made good provision whereas others do not have the facilities for the best care and treatment. It is important of course that those in the care of the state be given good medical attention, both as a responsibility of the state and for the protection of those who are physically well. The spread of infection will increase the problems of the institution, lessen its efficiency and result in added costs. Also as inmates from institutions leave to take their places in society, such infectious diseases as they may have may spread among those with whom they come in close contact." It is suggested that "every institution provide complete segregation of the tuberculous, and the best medical care." From this it seems that the physician may make an excellent hired man to work under the direction of a lay board of control which understands without consulting the physician how tuberculosis cases should be treated.

We are not criticizing the layman nor the governor's commission—the layman has a right to be interested in his own welfare. We are simply calling physicians to read the signs of the times, to note that if we don't steer our own ship we mustn't squeal when someone else turns it toward state medicine under lay control.

ECONOMIC CHANGES

The world is passing through some very radical economic changes and it remains to be seen whether or not in the end we are better off than we were a few years ago when things were going along rather smoothly and for the most part nearly everyone was contented and happy. There have been many reasons advanced as to the cause of our present depression, but it seems to us that it does not require any extended study or analysis to discover that the greatest share of our boasted prosperity of the last two decades has come to a limited number of people whom we have freely and even cheerfully helped to become millionaires and multimillionaires. We also have fooled ourselves into thinking that the common people are really more prosperous than the facts warrant us to believe, and consequently everyone is being told that he can and should emulate his more fortunate neighbor in not only living up his earnings but mortgaging future earnings in securing the ease, comfort and even luxury that none of the common people of any other country in the world have been able to afford. During prosperous times we had poor in every community, limited in number perhaps, but requiring and deserving of help from those who are fortunate. To care for these poor has furnished the excuse needed by thousands of people engaged in welfare work. Many women when not engaged in bridge or caring for a poodle dog have found welfare work a means whereby they could get rid of some of their surplus energy and at the same time obtain a certain amount of publicity so dear to so many feminine hearts. The welfare agencies are almost countless in number, they oftentimes more than otherwise overlap in their work, and many of them are conducted without the slightest regard for consistency or reason. Now that we are suffering from depression which works more or less hardship upon everyone except the well-to-do, the welfare agencies find reasonable excuse for more activities than ever before, and in the judgment exercised there is even more lack of consistency and reason. Thus we see great sums raised in one way or another for relief work, with the large and inevitable overhead, and much ill-advised wastefulness in the distribution of charity. It is said that Henry Ford, reputed to be a billionaire, has refused to give liberally to charity, and gives as his reason that he prefers to help people to work rather than to shirk. In that statement he enunciated a principle that should be more of a guide in the distribution of our benevolences, and right now, when so much is being done to help the unemployed, is the time to make jobs for those who need jobs. The Federal government, states, municipalities, and the philanthropic individuals, or aggregations of individuals, should make certain that their donations are for the purpose of furnishing work in connection with enterprises that will redound to the public good. In so doing we not only will make our country and our individual communities a better place in which to live, and furnish employment to those who really need it, but at the same time we will build up self-respect and independency among the very large percentage of our population that now is being encouraged to accept something for nothing, and most of whom, all too soon, will be dependents.

The members of the medical profession are interested in particular in the economic changes that are occurring, for it is not a far-fetched prediction to say that unless something is done to check present tendencies in welfare work, the time is not far ahead when medical men will cease to occupy the independent positions they do today, and will be reduced to a mere cog in a huge machine that will make everyone subservient to a scheme of service that offers neither decent monetary remuneration or hope of advance-

ment. What we need is a great deal more recognition of the fact that the people of this country will be happier and more prosperous when we follow Henry Ford's edict in giving everyone a chance to work rather than to shirk, and when such welfare work as needed will be directed in an intelligent way by those who are qualified by education and experience to manage such enterprises. The more we donate to and encourage idleness and dependency, the more we shall be burdened with demands for relief and the sooner we shall come to the inevitable day of reckoning when the few will be compelled to support the many. Idleness breeds discontent and discontent breeds trouble of one kind or another. To give the unemployed or the sick an opportunity to help themselves or to avoid being dependents of any sort is an enterprise that deserves and should have the serious thought of those interested in the safety, security and happiness of our country.

THE FULL-TIME HEALTH OFFICER BILL

In this number of THE JOURNAL, under "Special Articles," we print in full the health officer bill which has been presented in the Indiana legislature now in session. We also print in the Correspondence Department a letter presenting arguments for the bill, and answers to objections that have been raised. Finally, we present in connection with this editorial the brief or argument presented by the secretary of the State Board of Health, offered in favor of the bill. We earnestly urge every member of the Indiana State Medical Association to read the proposed bill and the arguments for it, so that there will be no misunderstanding concerning what is contemplated. In connection with the consideration of the matter it should be remembered that the Indiana State Medical Association, through its House of Delegates, at the last or Fort Wayne session, voiced its disapproval of the all-time health officer project as applied to present conditions, and some of the objections raised then and since by prominent members of the profession residing in various portions of the state may be mentioned briefly and are as follows:

At the present time it is impossible to secure enough medical men who have been educated and trained in public health work to fill positions as all-time health officers. To create a position and not have someone to fill it satisfactorily does not seem to be good practice. To fill the positions with poorly qualified men would defeat the purposes of the bill. An all-time health officer not only should be qualified and trained for the position but he should be paid an adequate salary. Inasmuch as the people at this particular time are crying for economy it is doubtful if such an increase in public expense as required to pay decent salaries to all-time health officers would be considered. At present the positions made possible by the bill no doubt would be filled by derelicts and incompetents who have made more or less of a failure of the practice of medicine. Good men could not afford to take the position with the prospect of losing it a little later through the caprices of politics, or because someone more technically trained for the position seeks and receives preferment. The expense will be burdensome on some communities, and already there is a cry for more economy in expenditure of public money. We cannot get something for nothing, and a good all-time health officer deserves, or should have, a good salary. It is admitted that the larger cities of the state can afford and should have all-time health officers. However, even they will have great difficulty in securing medical men adequately equipped for the position, no matter what salary is paid. The difficulties increase when you get away from the city. A quite general feeling prevails among the members of the medical profession of the state that the all-time health officer bill makes it possible for the development of a machine that may be ruthless in its work of perpetuating itself and establishing an intolerable domination. There also is a possibility of autocratic domination by the secretary of the State Board of Health, who, according to the terms of the bill, in a sense is a dictator. Indiana is not so far behind any of the states in its public health work, and, in fact, we have done very well under present conditions. Naturally we object to having laymen or members of pseudo-medical cults as health officers, but there are only a few communities where such a condition prevails, and efforts should be put forth to correct that injustice and inconsistency. In the majority of the counties of the state the health officers have been fairly representative men, and, as was stated before the House of Delegates at the Fort Wayne session, we are better off to have the part-time services of a good man than the all-time services of a poor man. We are not willing to admit that under present conditions you can get good men for all-time service, and in the final analysis that is the principal objection to even a permissive bill such as offered. Theoretically the full-time health officer project is worthy of acceptance, but for the present we do not believe that from a practical standpoint it will work out satisfactorily for the state as a whole. As a mere side issue we are firmly convinced that the full-time health officer project, no matter how much you camouflage it, is a stepping stone to state medicine, and there is ample proof to indicate that some of the most ardent advocates of the full-time health officer enterprise are openly or secretly in favor of and even working for the adoption of state medicine. It is a very natural thing for them to feel that way, for, if state medicine does come, the full-time health officer will be on the top wave and he will be the first one to profit. However, under appropriate safeguards the full-time public health officer can be of inestimable service to every community, but as we view the proposition it is

impossible at the present time to secure well-educated medical men who have had adequate special training in public health work to fill all-time positions, even in our cities, and that fact alone is one of the principal reasons for objection to the project under discussion, for we do not believe in creating positions without having educated and trained men to fill them. While we quite appreciate the fact that the bill as proposed is a permissive one, and in no sense compulsory, yet it is very easy to believe that when the machinery starts to work there will be much pressure brought to bear to make any community adopt the full-time health officer plan, even though it is expensive and does not bring the quality of service expected. The secretary of the State Board of Health has sent us his argument in favor of the bill, and while his communication is in the nature of private correspondence we decided, with his permission, to present his views, so that our readers will have his side of the question. The proponents of the bill certainly should be heard, since our Association officially has taken a stand against it. The brief or argument for the bill is as follows:

1. This is a bill for a permissive law. It is not compulsory but establishes an alternative method for administrative health work.

2. It applies to counties, to cities of 50,000 or more population, and to districts composed of two or more contiguous counties, not to exceed five in number.

3. The set-up is practically the same for the county, for the city or for the district, as the unit. Boards of county commissioners act for the county, city councils act for the city, and joint boards of county commissioners act for the district. This action may be voluntary, either with or without petition, and is mandatory upon petition of fifteen percent (15%) or more of the freeholders of the county, the city, or the district.

4. A health council is appointed in either case to consist of five members for the county or the city, and of two members from each county for the district. This health council appoints the health commissioner for the county, the city, or the district, and fixes the salary of such commissioner with a maximum of $5,000 per annum. After the health council has appointed a health commissioner and determined the salary for such commissioner, the health council thereafter acts in an advisory capacity only.

5. The compensation of the health council is fixed at $5.00 per day for official meetings. Health councils for counties and districts meet regularly four times each year, with special meetings as called by the health commissioner. City health councils meet regularly once each month, with special meetings as called by the health commissioner. The term of office of members of health councils and of health commissioners is four years, which is the constitutional term of office in Indiana.

6. Health commissioners are required to be graduates of recognized medical schools, to be trained in hygiene and sanitary science, to be able-bodied and of good moral character, *and must be approved by the State Board of Health* (italics ours). Health commissioners must devote full time to health work and are prohibited from engaging actively in any other occupation. Health commissioners are given authority to employ public health nurses, sanitary and other inspectors, office help and clerical assistance as may be necessary. County councils for the county and for districts, and common councils for cities are authorized to appropriate as may be necessary to support these full-time health departments and to enable such departments to carry out constructive community health programs. Such appropriations, however, shall not exceed $1.00 per capita, per annum, on the population of the county, the city, or the district.

7. Every safeguard that can be provided in law is provided in this bill to eliminate partisan politics and to provide for efficient public service. Health councils are required to be bi-partisan, qualification of health commissioners must be approved by the State Board of Health. Two members of the health council for counties and cities and one-half the council members for districts must be qualified physicians, and the State Board of Health is given general supervision and jurisdiction in the health programs of all full-time county, city, and district health departments.

8. Provision is made whereby cities within the jurisdiction of county or district health departments can make additional appropriations for such county or district health departments, for the purpose of assuring additional administrative health work in such city, through such county or district health departments. Provision is also made for a full-time city health department becoming the health department for the entire county where the population of the county outside the city does not exceed eight thousand (8,000).

9. The bill does not repeal any health law, but is supplemental to all health laws now in force. Any county, city, or town may continue under present laws and with part-time health officers. Any county, city of more than 50,000 population, or joint county district of not more than five counties, may establish and maintain a full-time health department as provided in this bill. It is provided that when a county, city, or district establishes a full-time health department under the provisions of this bill, such county, city, or district shall continue to operate under the provisions of this bill.

There is nothing experimental in any of the provisions of this bill. Similar laws have been enacted in many states and every provision of this bill is now in force and operation in other states. There are thirty-six states of the Union in which full-time county, city, or district health departments are in operation, some of which have been in operation more than fifteen years, and all of which are giving efficient, adequate health service to the community which they serve. There are more than five hundred counties in the United States having full-time health departments. The number of counties, larger city and district full-time health departments is constantly and rapidly increasing. It is the universal opinion of health authorities everywhere that the county, larger city, and the district for smaller counties, is the best and most adequate governmental health unit.

THE COST OF MEDICAL CARE

MEDICAL CENTERS RUN BY COUNTY MEDICAL SOCIETIES

The problem that has to be worked out in the United States is how to furnish the best medical service to all of the people all the time at prices within the means of all and without the overwhelming amount of unnecessary charity that is now being given too lavishly by the profession. To begin with we must recognize that the present charity clinics do not satisfactorily solve the problem. About the only connection that physicians have with these clinics is to contribute their services without cost to the institution and to the great majority of the patients who frequently are able and should pay something for the service. In order to correct this great abuse it will be necessary for the physicians to own and conduct their own clinics.

"The profession must organize, not as we are organized today, simply for scientific purposes,

but for business purposes as well. The general plan of organization of the profession is well established, and it is only necessary for each unit or county society to incorporate for business purposes and to add to its present duties that of looking after the material interests of its members. Each county society should then establish a medical center of its own, owned and managed by the society. This medical society should be the clinic of the community. What should constitute a community will naturally depend upon the size of the county or the number and size of the towns in the county, but as many centers as may be necessary to meet the needs of the people should be established. A center should consist of a suitable building or offices properly equipped for the diagnosis and treatment of all classes of cases. In other words it is a clinic, but not in the present sense of the free clinic but one in which all who receive services shall pay for them according to their economic status. The chief object of the center is to provide a place where those patients who are unable to have their own physician may receive the highest degree of medical care at a price within their means. There are many other advantages that these centers may bring to the physicians, such as providing laboratory and x-ray facilities for its members, headquarters for society meetings, general library, etc. It is a common fear of physicians that such a center would be a great burden of expense to the society. On the contrary it would be a great source of income since everyone would pay something and experience shows that such a clinic properly managed would not only pay the expense of overhead and renewals but also earn something which could be used to help pay the physicians for their services. Naturally, there are few people so unfortunate as not to be able to pay anything, *but such persons who are charges on the community would have to be paid for by the community at proper rates to be arranged for between the community and the center.* Of course there would be a business head who, with a superintendent and such other help as the size of the center would make necessary, would conduct the affairs of the center. The medical work naturally would be assigned to the doctors, the time and hours of service being arranged for in an equitable manner by the directors or trustees of the society. These centers, which would be established by the county medical society, would come under the general supervision of the state association and these in turn under the American Medical Association as in our present system of organization. The American Medical Association should encourage and foster the development of these centers all over the country. The numerous clinics that now exist for the free treatment of ambulatory patients would come under the control of the profession or else cease to exist; and the profession would then find itself master of its own business, something that is now rapidly passing into the hands of laymen.

"The scheme would not interfere in any way with private practice, since those patients, who are able to pay the physician's rates will have their regular doctors as at present. The time which physicians are now giving gratuitously to the care of millions that are being treated in free dispensaries would be given to their own medical centers where all patients would pay for all services rendered in accordance with their ability and which would not only be of enormous financial gain to the profession but of inestimable value to the people by instilling in them self-respect and thrift and economy.

"Let us act before we find ourselves in the same situation as our British confreres. Let us break the siege of medicine before it breaks us."*

UNCLE SAM AS NURSEMAID

Don't make Uncle Sam rock the cradle.

This is the plea of the Indiana State Medical Association in a protest against the enactment of federal aid legislation such as the Jones-Cooper Bill (S. 255) which is before Congress and has for its purpose the re-enactment of the old Sheppard-Towner law.

This protest is voiced in a bulletin issued January 10th by the Bureau of Publicity of the Indiana State Medical Association which follows:

"Why are the physicians of Indiana and throughout the country so vigorously opposed to such federal aid as provided by the Jones-Cooper Bill, which has as its avowed purpose the welfare of the American mother and her child?" is the question often asked by many women and welfare workers throughout the country.

The answer of the medical profession is in plain language:

"Because experience has shown that such federal legislation has failed to reduce materially infant and maternal mortality rates despite the enormous sums of money expended. If it could be shown that federal legislation and bureaus at Washington save the lives of American women and children, the medical profession would be the first to back such a movement just as it always has fostered the nation-wide safe and sane July 4th movement and the periodic health examination movement which are saving and prolonging thousands of lives these days."

Here are some of the points upon which the medical profession bases its opposition to such legislation as the old Sheppard-Towner and the new Jones-Cooper Bill:

1. Federal government should not meddle in state health affairs.

*Presented before the annual meeting of the Medical Society of the State of New York, June 2, 1930, by M. L. Harris, M.D., of Chicago, and reprinted from *The Rod and Serpent*, for September, 1930, in which it was reprinted from the *New York State Journal of Medicine*

2. No benefits were shown from the seven years' operation of the Sheppard-Towner Act which in any way are commensurate with the amount of money expended or with the sacrifice of the principle of state rights which the act involved.

3. The Sheppard-Towner Act was enacted to lower high maternal and infant death rate, but to date no evidence has been produced to show that the decline in the infant death rate has been accelerated or any effect has been produced upon the maternal death rate by reason of any activities carried on under the act.

4. The present bills before Congress propose federal interference in perpetuity.

5. This bill provides the administration of the law in the hands of the Children's Bureau of the Department of Labor under lay control rather than under the direction of the United States Public Health Service, where such matters should be handled.

The following remarks of ex-President Coolidge in one of his budget messages during his administration are timely in considering such legislation as the Jones-Cooper Bill:

"Federal interference in state functions can never be justified as a permanent continuing policy, even if, which is doubtful, such interference is warranted by emergent conditions as a temporary expedient. As shown in the maternity and infancy act, when once the government engages in such an enterprise it is almost impossible to terminate its connection therewith. We should not only decidedly refuse to countenance additional federal participation in state-aid projects but should make careful study of all our activities of that character with a view to curtailing them."

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

IT is reported that Sinclair Lewis says that he did not deserve the Nobel Prize. It is surprising how many people agree with him.

OUR present legislature will be wise if it provides for the licensing of motor vehicle operators on the basis of examination, designed to reveal the applicant's physical and mental capacity.

IT may go against the grain to try to satisfy a patient with inconsistent and unreasonable demands, but in the long run it pays, for as our grandmothers used to say, "You can't catch flies with vinegar!"

WE note that the Committee on the Cost of Medical Care seems to put forth special effort to pick out cheapness, and we are tempted to ask, "Doesn't the Committee take the question of quality into consideration?"

IT is only recently that we have learned that there is such a thing as aspirin exhilaration and that a certain number of people, perhaps possessing a peculiar idiosyncrasy, take aspirin whenever they want to be "pepped up."

THE reception room table of every member of the Indiana State Medical Association will look better if it has on it a copy of *Hygeia*. Write now, in care of the American Medical Association, to enter your name as a subscriber to *Hygiea*.

WE take it for granted that you have paid your medical society dues. If we are mistaken, then heed the warning. You are delinquent on and after February 1st if your State Association dues are not in the hands of the executive secretary by that date.

EVERY few nights we hear over the radio that over twenty thousand physicians have indorsed Lucky Strike cigarettes as free from throat irritation and best for the health of any smoker. It is a little embarrassing to think that such a large number of physicians, supposedly intelligent and possessed of a little common sense, can make such monkeys of themselves.

A COMPANY in the east agrees by contract to pay medical expenses up to one hundred dollars over a period of a year, at a cost of twenty-five cents per week to the person buying the contract. Some of the better business bureaus say that this scheme falls under the jurisdiction of the insurance department, and that before buying such contracts it would be well to find out whether the company has been qualified and licensed to sell insurance.

GEORGE BERNARD SHAW, reputed to be one of the brainy authors and who has been shown more consideration and courtesy by the American people than he deserves, quite recently ridiculed us from a variety of angles and wound up by saying, "I insult them and they like it. I am careful never to say a civil word to them and they adore me." To our notion George Bernard Shaw should be taken to a psychiatrist for treatment. His delusions may become more dangerous.

PHYSICIANS who are rendering services in compensation cases should remember that the fee comes from the insurance carrier as a rule, and if the insurance carrier is not charging policyholders enough to justify the payment of reasonable fees for medical and surgical services rendered, then the insurance premiums should be increased. It is inconsistent to pass the carrying charges on to the physicians, who already suffer enough in loss of remuneration.

THE United States Public Health Service has definitely identified the cause of ginger paralysis which has numbered thousands of victims. The paralysis is not caused by ginger at all but by a compound known to chemists as triorthocresyl phosphate which is used by irresponsible manufacturers to make a synthetic ginger. The Public Health Service has no record of a single case of paralysis caused by ginger preparations manufactured by reputable pharmaceutical firms.

YES, let's have a few more health conferences to which no medical men are invited but which are sponsored and dominated by uplifters and propagandists of one kind or another, with now and then a health officer who has his own nest to feather and is putting every effort forth to see that no one else takes his place. Well, childless women who never have gone within a block of any youngster can tell any mother how to raise children, so why shouldn't lay uplifters be the dominant factor in health conferences?

THE daily newspapers carry the announcement that the national anti-vivisection society will introduce a bill in the present Indiana legislature prohibiting animal experimentation. It is pathetic to think that a handful of people, well financed by the sentimental and wealthy, can hold the attention of any legislature in an endeavor to halt progress that is aimed at the saving of life and the preservation of the health of not only humans but animals. Well, medical men, buckle on your swords, and make use of your best ammunition!

IT would be a good thing if every member of the Indiana State Medical Association would send a telegram or letter to Senator James E. Watson, and Senator Arthur J. Robinson, and to the member's congressman, protesting against the Jones-Cooper (S. 255 and H.R. 1195) Bill, which if passed means the revival of Sheppard-Townerism. Certainly messages of protest should be sent as official communications from every local county medical society and from every district medical organization. The State Medical Association already has acted.

WE are pleased to announce that the scientific exhibit at the next, or Indianapolis, session of the Indiana State Medical Association will be better than ever if the director has his way about it. Those who desire space should get in touch with the executive secretary. There is no feature of our annual session that is more valuable than the scientific exhibit, for it really represents research work and progressiveness in the practice of medicine. It deserves encouragement and support and should be attended and appreciated by every member of the Association.

METHANOL is the new name for wood alcohol, but none the less poison in spite of its new name. It is poisonous when swallowed, inhaled or absorbed through the skin, and is a cumulative poison. The toxic dose is not large and is easily reached even when the amount absorbed daily is too small to produce noticeable initial effects. It vaporizes readily in automobile radiators, and, therefore, garage employees and automobile owners should be particularly careful in the use of methanol as an anti-freeze solution. The traffic in methanol or wood alcohol should be controlled in the interest of the public.

THERE will be fewer bank robberies and holdups when justice is short but effective through cold lead treatment. We sometimes wonder why surgeons and nurses make an effort to save the lives of some of these bandits who have been wounded while trying to shoot their way out of trouble. If they live they often are not sent to prison, and if they are sent to prison they frequently get short terms and always stand a good chance of pardon by some sentimental governor. The fact that one or a half dozen people have been ruthlessly killed by the bandit does not seem to be taken into consideration.

WELL, well! The manufacturers of a well-known antiseptic, which was so introduced to the medical profession for approval and then advertised and sold direct to the laity, now has the nerve to write direct to physicians and say that a new product now offered for the approval of the medical profession will be placed on the general market very shortly, and again the physician is to be "the goat" in aiding self-prescribing and incidentally bringing great profit to the manufacturer. Will physicians ever cease the practice of indorsing commercial products, and in aiding self-prescribing on the part of the public?

COPYING the plan followed in selling Red Cross seals, there are certain persons who call upon business firms and others soliciting donations of sums of money to a "Go to church Sunday" campaign, through the use of small sticker stamps. In one city an investigation developed the fact that a promoter had sold the idea to a group of women connected with a local church, on the basis of a small amount being paid to the woman's organization for the use of their name. The matter was

taken up with church officials, who severed their connection with the proposition, but not until the promoter had made a satisfactory clean-up on a number of victims who failed to investigate before investing.

WE do not know who is back of or what the commercial object if any is behind the Iodine Educational Bureau of New York City, but we are very much in sympathy with the assertion made that nothing takes the place of iodine as an antiseptic. The truth of the matter is that we are altogether too free to accept the specious claims of manufacturers concerning the potency and efficacy of various preparations that supposedly are better than iodine for antiseptic use. We, therefore, are quite in sympathy with the idea of impressing upon every medical man the fact that iodine has demonstrated great penetrative ability and high germicidal potency and it deserves a leading place in the antiseptic field.

THE important thing in the minds of some people is to buy gasoline for the car and pay for a new radio on the installment plan, whether they have enough to eat or not, according to a public statement by the New York state commissioner of health. We might add that the average individual has several other installments to pay before he can pay the grocer or the butcher, and, as for the doctor—well, no such individual exists during times of depression, insofar as paying said doctor any money is concerned, even on the installment plan. The fact of the matter is that installment paying has been the ruination of this country, where with plenty of everything we hear tales of real want from one end of the country to the other.

F. A. STEVENSON, in *Current History* for October, describing Canada's feeling toward the United States, says: "Canadians cherish the belief that they enjoy through their existing political and social order certain manifest advantages over the United States. For one thing they have an infinitely more lasting political system so that adjustments which the interests of the country demand may be made without undue stress and strain. Again, throughout the whole dominion the administration of justice is both efficient and rapid, and law-breakers receive short shrift. The lurid stories of the successful exploits of lawless elements which emanate from Chicago and other places fill Canadians with amazement that such a state of affairs could be tolerated."

SOME busy doctors send out statements once in six months and in some instances only once a year. When asked by a patient as to the amount of his bill the easy-going doctor is very apt to say, "Forget about it until you receive a statement." Sometimes when the statement is received the patient is unable to pay the bill although he could have done so at the time the services were rendered. Perhaps volume of business makes up for loss of income through careless business methods, but what a poor example for the young and struggling physician who needs every cent that he earns and should have it as early as possible after the services are rendered if he is to maintain his own credit and self-respect. In this day and age people expect their statements not later than the first of the month following the rendering of services, and some people will stop patronizing a professional man or a commercial firm that does not send out statements promptly.

HEALTH Commissioner Wynn of New York City, in one of his radio addresses, warned the medical profession that it must make a choice between state medicine or reorganization of medical services and fees. He might have added that the cost of illness does not fall heaviest upon the public in consequence of fees to the medical profession, and he should have emphasized that not only should the hospitals reorganize their services and fees, but the public as well should revise its tactics and be satisfied with less superfluous hospital service, special nursing, and many other unnecessary frills that now are expected if not demanded by people in even moderate circumstances. Why make medical men "the goat" when the trouble lies deeper than any hardship occasioned by medical fees. We get peeved when a lot of uplifters, not omitting some of the public health officers who would be on the top wave if we get state medicine, want to make out that the high cost of illness is due to the fees received by members of the medical profession, many of whom, if the truth were known, have a hard time making both ends meet. It is time to paint the picture in its true colors.

INDIANA has had some wonderful governors—men of ability, unquestioned integrity, and commendable constructive activity. On the other hand, it has had a few governors, and fortunately very few, who disgraced the governor's chair, the state and themselves. The present governor seems destined to take his place among the great of his predecessors. He certainly has placed his stamp of disapproval upon some of the projects fathered by corrupt politicians and unscrupulous office holders who have been working for selfish ends. His latest action deserving the hearty commendation of every taxpayer in Indiana was to disapprove publicly the conduct of those who every one or two years scandalously attempt to force upon the school population of the state new textbooks at an enormous and unjust expense. It has been rumored that graft, and whole bunches of it, is connected with the granting of contracts for the furnishing of school books, and to all outward appearances the rumors seem to have an abundance of evidence strongly pointing that way. If Indiana's governor will stop a lot of extravagance and graft which apparently occur in many other de-

partments of the state he will go down in history with more praise than has been accorded any of his predecessors.

THE Committee on the Cost of Medical Care has been hearing things concerning group clinics and general hospitals in Indiana which are offering a contract medical service, and the questions now are asked, first, "Do you know of any hospitals or group clinics in your state that are offering medical service to individuals or to employers for the benefit of their employees on a contract basis?" The contract is, of course, an agreement on the part of the hospital or clinic to furnish a certain type of service during a stipulated period of time in return for a fixed fee paid by the contract holder. Second, "Do you know of any corporations or associations offering such service that are arranging with practitioners and hospitals to give the medical service?"

Well, while it is merely hearsay, yet we are fairly well satisfied that medical and surgical service on a contract basis such as described is rendered in numerous localities in Indiana, but the examples are not so common nor so objectionable as in many other portions of the United States, and particularly in the South, though we confess that we do not believe contract service in the strict acceptation of the term conduces either to a high grade of service or the following of exemplary ethical conduct.

THIS is a period of economic change, and it is a period when bolshevistic and communistic ideas run rampant. Let us hope that Congress and those state legislatures that are in session now do not force us into trouble through hasty enactment of unwise legislation proposed by demagogues and visionary enthusiasts who hope to benefit themselves by trampling others down. Medical men have much to fear as a result of the growing socialistic or communistic feeling which is enhanced by this period of depression. The fact that we have an unequal distribution of wealth and that at the present time a large proportion of our working people who until recently have been the best clothed, the best fed, and possessed of the most luxuries of any people in the world are now unemployed, is no logical reason for assuming that we all would be better off if each and every one of us were put on a level and each and every one of us required to punch the time clock. We may have to regulate some things that now are not regulated, but there is no reason why everything should be government controlled, for, as demonstrated in several countries in Europe, there is such a thing as having too much governmental domination, with its inevitable destruction of initiative and enterprise, and economic chaos for its people.

THERE are any number of small, little known, poorly financed insurance companies that are soliciting physicians for business by offering accident, automobile or medico-legal protection at less than the customary rates charged by the well-established insurance companies. Several readers of THE JOURNAL have complained about being swindled by some of these cheap rate companies. Again we wish to say, as we have said before, that it is entirely possible, even probable, that occasionally a small and not well-known insurance company can be depended upon to treat its policyholders with the utmost fairness and liberality, but such companies are greatly in the minority, and it is unfortunate that they must be classed with those not so dependable. The truth of the matter is that the physician who buys insurance of any kind will be wise if he secures his policy from one of the well-known, well-financed and well-reputed companies. Most any company is all right as long as you do not have a claim, but the Lord have pity on you when you try to recover on a policy taken out with some of the less-known companies. Don't be fooled by the "cheap rate" song that some of the agents sing. If you get something that is trustworthy you will have to pay a decent price for it. The price will be essentially the same in all reputable companies.

WE have said so much about tricky and dishonest collection agencies that it seems foolish to talk about the matter any more, and yet despite all that is said on the subject, we still receive complaints about collection agencies, and one physician writes us, "How is the doctor to protect himself against these fakers?" We can answer by quoting from an advertisement of the Better Business Bureau of Rochester, New York, which says that the large number of complaints registered with the Bureau has led to the following deduction: First, that a large percentage of the high pressure agencies are more interested in securing the payment of a docket fee than they are in making collections. Second, that the large percentage of high pressure collection agencies do not make any returns to their clients; third, that many of the contracts involved are within the law but are so worded that it is next to impossible to hold the agency legally; fourth, that the methods of many of the high pressure collection agencies are unjust, and that the debtor is subjected to treatment which absolutely destroys any semblance of good will which he may have held for the creditor; fifth, that a large percentage of the high pressure collection agencies stay for a few months and then disappear; sixth, investigate thoroughly any out-of-town collection agencies.

EVERY once in a while we learn that some well-trained and fairly well-known physician has employed a press agent for what perhaps he considers as an ethical way of advertising himself. Recently we had called to our attention something that for downright nerve takes the prize. First, the surgeon writes us that he has devised and put into

practice a new technique for carrying out certain forms of cosmetic surgery which in his hands has been exceptionally satisfactory; second, a press agent who advertises himself on his stationery, sends a so-called scientific contribution from the aforementioned cosmetic surgeon for publication, and in the article the cosmetic surgeon "toots his own horn" and takes advantage of the opportunity to give his complete address; third, a news note, presumably for the public press and having the customary release note, is sent out for publication, and is very adroitly worded to cover very patent advertising of the cosmetic surgeon; fourth, in due course of time a letter arrives from the press agent saying that if the scientific article has been used, he will be pleased to have a check for twenty-five dollars covering the same.

We have an idea that most of the medical editors throw such stuff in the wastebasket, but the thing that surprises us is how any physician, even the most blatant advertising quack, could expect any editor to "fall" for such a scheme.

THE United States Public Health Service has issued to the public a statement concerning immunization against the infectious diseases of childhood. The bulletin should be in every home where there are children, or, better still, family physicians should put forth a special effort to acquaint the parents with the summary of what is contained in the bulletin, some of the highlights of which are as follows: Children should be vaccinated against smallpox before they are a year old; upon entering school they should be vaccinated again. Diphtheria is an entirely preventable disease. Toxin antitoxin mixture is a preventive and evidence seems to indicate that it is capable of immunizing for many years those to whom it is administered, and possibly for the remainder of their lives. Diphtheria toxoid probably is even better. Either of these preparations can be relied upon absolutely to immunize everyone to whom it is given, and the administration of either of them always should be followed by a Schick test to find out whether immunity is complete or not. If not, additional injections should be given. By the use of these preventive agents it is believed possible absolutely to eradicate diphtheria. Inasmuch as the pre-school age has appeared as the age when the greatest danger from diphtheria occurs, special emphasis is placed upon the advice that preventive injections be given as soon after the age of six months as possible.

THE *Indianapolis News* of December eighth says that practically all the evils that attended the old Sheppard-Towner measure are to be found in the Jones Federal Aid Maternity Bill, to which priority has been given in the Senate. The Jones Bill would authorize an annual expenditure of one million dollars among the states to promote the health and welfare of mothers and infants. Each state receiving a portion of the fund would be required to supply an equal amount of state funds. For promoting the health of mothers and infants the proposed one million dollars would be inadequate. Physicians have opposed the plan on the ground that such matters are for the individual states to handle. There also is opposition to the trend toward bureaucratic domination and the creation of federal positions that are unnecessary. Indiana maintains as a part of the public health department a division devoted to the welfare of mothers and their babies, and information, instruction and assistance are available. The feeling has been that the country might look to Washington for suggestions about pupblic health, educational programs and other subjects of vital interest to social welfare, but that the state should put such programs into practice. Sending money to Washington so that a portion of it may come back is not sound economy. The people must provide the funds and the money will go farther and do more good if spent at home.

IN discussing the subject of obesity the *Journal of the A. M. A.* for November 15, 1930, called attention to the fact that many people consume food in excess of their requirements, but there are many examples of the perversion of appetites, and the interest in food by certain types of emotional persons is often so great that some motive must be supplied to make them undertake a change in their food habits. It is important that the medical profession give more serious consideration to the many factors, dietary and pathologic, that the problems of obesity involve. The indifference of many physicians to the details of successful treatment has played into the hands of the quack and the impostor. Advertised preparations are often used without medical consultation. Such practice is highly dangerous in the absence of expert medical advice, for thyrotoxin exerts a stimulating action on the whole of the body metabolism. It does not merely encourage the combustion of fat but faciliates just as much the burning up of more useful and essential materials such as tissue protein, so although an obese person may actually lose weight as the result of taking thyroid extract, this loss may be due to removal of essential body constituents as much as to the removal of excess fats that the body has stored. Furthermore, if a person possesses a normally functioning thyroid and takes more thyroid for reducing the fat, the harmful effects of excess of thyrotoxin are liable to be produced. Therefore, the management of obesity calls for medical intelligence.

IN order to improve the character of medical service rendered, an agitation is on foot to limit the time that a license to practice shall be in force, so that renewal will depend upon reexamination or evidence that the licentiate has received recognized postgraduate instruction in order to improve his qualifications for rendering medical and surgical service to the public. The

argument is advanced, and perhaps a very just one, that many physicians practicing medicine today know little more than they knew when they came out of college perhaps a decade or more ago, and for the reason that they are not taking advantage of opportunities for improving themselves by a systematic course of reading or an occasional postgraduate course.

There also is an agitation concerning the propriety of licensing specialists or in some manner requiring that anyone who shall hold himself out as a specialist must show that he is qualified by education and training to be classed as a specialist. At the present time there are altogether too many men who after little or no special training pose as specialists, and being incompetent do themselves as well as the public great harm. There is much food for thought in the suggestion that has been made. Many physicians who rightfully are entitled to be called specialists have earned the title through prolonged study and experience before posing before the public as specialists. It is unfortunate that more have not followed such a course of preparation, and anything that will improve conditions in a rational way should be welcomed.

OUR legislative committee has been asked to prepare a bill for enactment by the present legislature to correct the injustice that is being done to physicians and surgeons and the working men of the state through the operation of the present workingmen's compensation law through a clause that limits the liability of the insurance companies for surgical treatment to a period of thirty days. The better class of insurance companies do not limit medical and surgical treatment of the injured who come under the compensation law to thirty days, but pay all reasonable bills for a considerable period after thirty days. However, we regret to say that there are some insurance companies that stick to the thirty-day limit, to the injustice of the worker, the attending physician, and even the employer. It might be well to make the law more stringent, but in doing so we should be very careful to ask for nothing that is unreasonable for fear that we may lose all that we have gained. Furthermore, it must be remembered that the committee on industrial and civic relations of our State Medical Association has helped to iron out many of the wrinkles that existed before we established an unofficial way of arbitrating disputes to the best interests of all concerned. Our compensation board, so far as we know, has been commendably fair in its treatment of the members of the medical profession, and if anyone thinks he has a grievance he should take it up with the Committee on Industrial and Civic Relations of our Association, and if he doesn't get satisfaction that way then let him move over into Ohio and see how little consideration is given such matters there.

COMPLAINT has been made that the Indiana Tuberculosis Commission appointed by Governor Leslie to study the tuberculosis situation in Indiana did not consult the medical profession of the state to any considerable extent concerning the matter. The commission, as we understand it, was composed of six people, not one of whom is an actively practicing physician. The program recommended by the commission calls for the construction of nine sanatoria, which we confess is an ambitious undertaking and we question if it is at all judicious. Judging from the data presented we are inclined to believe that two or at the most three state sanatoria would be all that is required. Certainly it is a large undertaking to establish and maintain nine sanatoria, and if such a program is carried out there shouldn't be any doubt as to a tuberculous patient in Indiana being able to secure appropriate care and attention.

Ignoring the medical profession when considering health projects seems to be popular. The White House Conference is an example, for while many physicians were present at the conference yet with three thousand people invited by the president to attend the Washington conference no one was asked to be present as representing the organized medical profession of Indiana, and we presume that other states were treated with the same dose of medicine. All of which goes to show what we have been talking about for some time—that more and more the practice of medicine and everything pertaining thereto is falling under lay control and lay dictation. Meanwhile doctors are squabbling among themselves over petty jealousies and professional ambitions instead of uniting to protect the interests of themselves and the public.

"THE Vagaries of Medical Ethics" is the title of an editorial in the *Minneapolis Journal* of September 5th, in which the medical profession is criticized for that portion of ethics which forbids advertising, and closes by saying, "Why does the medical profession with medieval blindness deprive itself of one of the greatest and most efficient of modern agencies? Why does it not apply to advertising the same scientific spirit of inquiry that animates it in other things instead of enshrouding itself in ancient prejudices? Why does it not compete masterfully with quackery by efficient use of the very tool that quackery has so misused? Meanwhile the public suffers through ignorance of what the profession has to offer for the alleviation and cure of physical ills. Meanwhile the public falls for patent medicines and charlatan practices. Meanwhile the public is paying the bill for the obstinacy of the profession in sticking to its out-dated and constricting codes." To which the *New England Journal of Medicine* (October 9, 1930) answers very tritely, "the individual physician cannot advertise, nor can the clinic organized on the basis of a paying private practice. The axe to grind is too obvious, and there is not sufficient responsibility for the accu-

racy of claims made. Philanthropic clinics, however, organized under proper auspices for the public welfare, should advertise. There is no valid reason, to our mind, why properly constituted medical societies should not advertise, if you will call it that, in an educational manner; in fact, there is every reason why they should, for fire must be fought with fire, and if we have sound wares as opposed to unsound ones, in all conscience let us not be ashamed to present them."

WHAT a blessing it would be if we could determine with scientific accuracy the cause of the common cold and, better still, discover a specific and preventive treatment. Many studies have been undertaken, and quite recently Shibley, Mills and Dochez have reported in the *Journal of the A. M. A.* for November 22, 1930, the results of their work. They employed anthrapoid apes as well as human beings in their experiments, and acting on the generally accepted theory that a filtrable virus is the cause of the common cold they excluded the pneumococci, streptococci, Pfeiffer's bacillus, staphylococci, the gram negative cocci, and the gram negative filter-passing bacteria, and utilized the filtered nasal washings for inoculation. Of sixteen animals used, seven contracted experimental colds, or an incidence of forty-four per cent of successful transmissions. The symptomatology of the experimental cold resembled exactly that of the spontaneous cold, including the incubation period. Human volunteers were then used, and out of nine persons four developed experimental colds, or an incidence of forty-four per cent of positive experiments, the same as that obtained in the study with anthrapoid apes. Filter-passing anærobes were present in all the filtered nasal washings used in the studies of human transmission, both in the positive and the negative results. The varieties of anærobes present were the same in the two instances. These organisms are not believed to possess primary etiologic significance. The authors conclude that the contagious cold in human beings is caused by an invisible uncultivable filtrable agent which in all likelihood belongs to the group of so-called submicroscopic viruses.

IF the free clinics in our large cities were patronized by the indigent and very poor only, little criticism could be offered. However, it is a well-known fact that many people who could pay something for the services, and should do so out of self-respect and to lessen a tendency to dependency, are seeking and securing free medical and surgical service. Under the circumstances is it any wonder that analytical business men are saying that we must cut down on the extravagance occasioned by the abuse of our charity and organize enterprises that will provide services at a minimum cost to those who are able to pay something for the same. The logical outcome is the formation of clinics, like the one sponsored by Rosenwald and his friends in Chicago, where good medical and surgical services are furnished at a minimum cost and at a modest profit to the enterprise. There is also the reason that physicians and surgeons, upon whom the service depends, are willing to accept salaried positions. Clinics of that sort are going to spring up all over the land, and every populous community finally will have its community clinic, with the inevitable result that the quality of services will be impaired and personal initiative in the medical profession will be destroyed. All of this could have been prevented if the medical profession itself had heeded the warning sounded years ago, and organized for the purpose of doing exactly what laymen are doing now and will do in the future. In other words, as a result of our apathy and indifference to economic progress as it pertains to the practice of medicine, we are slowly but nevertheless surely being driven to the position of salaried employees required to punch the clock and put in the hours and render the service that laymen demand of us.

NEWSPAPERS announce that Dr. H. B. Boram, of South Bend, is assisting the Wickersham commission appointed by President Hoover to study the causes of crime in the United States. One of the South Bend newspapers, under date of November 11, 1930, announces Boram's return to his home city after a two weeks' study of criminals and their physical aberrations at the Federal penitentiary at Atlanta, Georgia, and that "he is associated with Dr. A. M. Guild, noted Chicago orificial surgeon and chairman of the medical committee appointed recently by Chairman Wickersham of President Hoover's crime commission." As might be expected, Boram submitted to the inevitable interview and exploited himself to the fullest extent. Now come the president and secretary of the St. Joseph County Medical Society, with headquarters at South Bend, who offer information concerning one Dr. H. B. Boram, of South Bend, as follows: "This man Boram is notoriously an advertiser whose standing in the local profession is *nil*. He has been denied the privilege of practicing in Epworth Hospital, this city. He never has been acceptable for membership in the St. Joseph County Medical Society. * * * Any clinical interpretations, deductions or recommendations made by this man Boram should be carefully scrutinized. It is the opinion of men of unquestioned integrity and professional ability in this community that any report he may make is worthless."

Ye gods! Isn't there some way that the regular medical profession through its parent organization, the American Medical Association, can find some way to have reputable and trustworthy medical men appointed to official positions by federal, state, county or municipal bodies as representatives of any commission or committee that is to do dependable scientific work or investigation and report intelligently thereon?

IN discussing America's high maternal mortality rate, Dr. Frank L. Wood, in *Northwest Medicine* for October, 1930, summarizes as follows:

"Our high mortality rate is not due to lack of expert nursing, lack of hospitalization, or lack of prenatal care, for many physicians who are denied the advantages of trained nurses and hospital, and whose patients cannot be induced to accept prenatal care to any extent, are having a mortality rate that is negligible.

"Our high mortality rate is due to haste, neglect and indifference on the part of individual physicians, and to the adoption of a technic not adapted to the nature of the case or its surroundings. The mortality rate of the individual physician depends more upon the time, care and attention which he gives to his patient at the time of her delivery than it does upon special training or any other factor. There is not enough personal non-surgical assistance rendered the patient by her physician and often too much surgery.

"Nurses should not be permitted to administer anesthetics, including rectal, except under the direct supervision of the physician. They should not be permitted or required to make examinations.

"The physician should be present during the painful part of the first stage of labor and throughout the whole of the second stage. Besides relieving the pain safely, he can often render valuable assistance and shorten labor many hours. If he has not the time to render this service, he should accept fewer cases or engage an assistant physician.

"The incidental expenses of childbirth are often too high for the average middle-class patient, and are an important cause of race suicide. These expenses can easily be reduced, if the physician will adapt himself to the circumstances of the patient and give her the personal services that he should, but which he often relegates to others."

DR. M. A. AUSTIN, of Anderson, the very capable and efficient secretary of the Madison County Medical Society, arranged a program for the November meeting of his society that certainly redounded to his credit. The meeting was in honor of the physicians seventy years old or older, and the bulletin for the meeting was entitled "Lest We Forget." Among some of the things that Doctor Austin said in his notice of the meeting are the following: "Reminiscences of the hardships of practice in the early days will not be told at first hand much longer, as too few of the men now in practice made their beginnings back in the gay nineties. Bring any physicians whom you may know who are seventy years old or older as the guests of the society. We are to forget that we ever considered that the homeo, the physio-med, or the eclectic is anything but a good physician, for they all have contributed something to the cause of regular medicine. Don't throw this notice in the wastebasket for you may be the next one to have your obituary in the newspapers and get a bouquet from the secretary that you can't smell. This meeting may be the last one that some of these older men may ever attend, and every member of the society is delegated a committee of one to bring some other physician to the meeting. Have every old physician in the county in attendance, and let the younger ones come and show their respect to these men by attending. After you are fifty years of age funerals are all too frequent among your friends, and only when you have passed will you receive all the reward to which you are entitled. Let us take a few hours' time at this unusual meeting to renew old acquaintances, forget old differences, and drink a toast to those who have passed beyond. Some of us are possibly getting to that place in life where we are being crowded out by some of the younger fellows who have yet to learn that medicine is an art more than a science, and for all that we would seem to gain in our laboratories the test of time shows the final result to be the same—the Reaper with his scythe takes us all."

THERE has been much criticism in several counties in Indiana concerning the practice of some physicians in permitting if not even soliciting newspaper publicity in connection with their medical and surgical cases. Certainly a physician who courts newspaper publicity in connection with his professional work, presumably for the purpose of advertising himself, is deserving of criticism on the part of his confreres and he should not be surprised if found guilty of unprofessional conduct. Concerning this question of advertising, the Code of Medical Ethics adopted by every regular medical society among other things has this to say: "It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertising, or by furnishing or inspiring newspaper or magazine comment concerning cases in which the physician has been or is concerned. All other like self laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertising possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct."

In passing we desire to say that we do not believe there is a newspaper in the state of Indiana that on request will not omit the names of physicians in connection with medical and surgical cases. As a solution to the vexing problem that threatens to disrupt some medical societies in Inaidna, we suggest that every county medical society in the state, through its accredited officers, appeal to the newspapers in their several communities with the request that names be omitted in connection with medical and surgical cases, but

agreeing to furnish at all times such information as the public is interested in or has a right to know, providing the giving of such information does not conflict with the rights and wishes of the patient or give publicity to the physician.

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP

INDIANAPOLIS

ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

Question: Has one holding a limited license to practice medicine under the 1927 Act the right to demand the admission of his patients into hospitals supported by public funds and treat them in such hospitals? What is the law governing the rights of physicians to treat patients in hospitals in Indiana?

Answer: Hospitals may be classified into these three groups:

1. Private hospitals, being those founded and maintained by private persons or corporations, the state or municipality having no voice in the management or control of its property or the formation of rules for its governemnt.

2. Public hospitals, being those founded and maintained by public funds and under the exclusive ownership and control of the state or some governmental unit of the state.

3. Private hospitals supported in part by public funds.

Hospitals of the first group, while they may be subject to certain regulations and may be required to obtain a license for their operation, make their own rules for the admission of patients and also for the use of such hospitals by physicians. If such private hospital is incorporated the corporation, through its stockholders and directors, determines matters of this kind just as any other corporation managing its own business. Such private corporations may be organized under 1926 Burns, Sections 5351 to 5358, or under 1926 Burns, Sections 5358 to 5364.

Special conditions have developed in so many communities affecting hospital organization and support that a large number of statutes have been enacted.

Hospitals in the second group, as above mentioned, may be organized under the following various acts of the legislature: The County Hospital Act of 1903, the County Hospital Act of 1917, the County Tuberculosis Hospital Act of 1913, the authorization to the city common council to establish hospitals in the Cities and Towns Act of 1905, and the Act of 1913 authorizing the Board of Health in cities of the first class to maintain hospitals.

Privately established hospitals may receive aid from county funds under the terms of the County Hospital Act of 1919, or under the Act of 1907; or from city funds of cities of the fourth or fifth class under the Act of 1917; or from city funds in cities of from 70,000 to 84,000 population under the Act of 1921; or in cities of the first class under the Act of 1927; or in cities of the fourth and fifth classes under the Act of 1929; or under special conditions as provided in the Act of 1907; or from township funds under the Act of 1927.

Under all these last named provisions the public funds would be used to aid hospital associations carrying on benevolent institution not for profit.

The management and control of the hospitals built under these various acts, whether solely built and maintained by public funds or by public funds used in the aid of a hospital association, is determined by the particular act under which the hospital is established and maintained. There is a general uniformity in the various acts as to such management and control.

The County Hospital Act of 1903 provides:

"Any reputable physician residing in any county in this state so establishing or (ac) requiring a hospital under this act may have his private patients cared for at such hospital, under the same conditions and upon the same terms that other pay patients are cared for at such hospital, and such physician shall be permitted to attend and in all things treat his said patients in the manner that to him seems best; PROVIDED, however, That all physicians shall be subject to the rules and regulations of said hospital, and said rules and regulations shall be the same to all physicians by this act authorized to have their patients cared for at said hospital."

The County Hospital Act of 1917 provides that the board of hospital trustees shall make and adopt such by-laws, rules and regulations for the government of the hospital as may be deemed expedient for the economic and equitable conduct thereof and shall, "in general carry out the spirit and intent of this act in establishing and maintaining a county public hospital, with equal rights to all and special privileges to none." In addition to these general provisions the act contains the following section:

"In the management of such public hospital, no discrimination shall be made against practitioners of any school of medicine recognized by the laws of Indiana, and all such legal practitioners shall have equal privileges in treating patients in said hospital. The patient shall have the absolute right to employ, at his or her own expense, his or her own physician, and, when acting for any patient in such hospital, the physician employed by such patient shall have exclusive charge of the care and treatment of such patient, and nurses therein shall, as to such patient, be subject to the directions of such physician; subject always to general rules and regulations as shall be established by the board of trustees under the provisions of this act."

The County Tuberculosis Hospital Act gives the Board of Manager, "general superintendence, management and control of the said hospital . . . of the inmates therein and of all matters relating to the government, discipline . . . and make such rules and regulations as may seem to them necessary for carrying out the purpose of such hospital."

The Cities and Towns Act of 1905, being (Section 10284, Clause 51), merely authorizes the Common Council to enact ordinances for the pur-

pose of establishing, maintaining and regulating hospitals.

The Act of 1913 gives boards of health in cities of the first class the power to "govern, manage, maintain, regulate and direct the use of the same (public hospitals) and to make rules and regulations for their proper management and government."

The act by which counties may aid private hospitals in cities of the fourth and fifth classes contains no special authorization of power to the managers and trustees, but requires only that they be entirely non-sectarian and non-political and that the county commissioners shall have the right to select at least one-half of the members of the board of managers or trustees. In such hospitals the Board of Managers or Trustees, it would seem, would have the same power as they would have in private hospitals not maintained by public funds but operated as a benevolence.

The act under which cities of the fourth or fifth class may aid a hospital association contains the following provision:

"Such hospital, when constructed, shall be open to all citizens of such city on reasonable terms, and shall be open, on reasonable terms, to all physicians of such city who desire to place patients therein."

This provision applies to hospitals constructed under the Act of 1927.

There is no special provision in the Act of 1921 concerning the government of hospitals aided by cities of from 70,000 to 84,000 population. This leaves the management in the hands of the board of trustees with power to make reasonable rules and regulations.

The Act of 1929 under which cities of the fourth and fifth classes may maintain hospitals contains the following provision:

"The board of governors shall have exclusive charge, management and control of the city hospital or hospitals of such city and upon the taking effect of such ordinance and the appointment of the board thereunder, the jurisdiction of the board of health over such hospitals shall cease."

In the 1907 Act the Board of Trustees exercises the same power as in a private hospital but the manner of the selection of the board is limited by the terms of the act.

The management of the hospitals receiving aid from township funds is in the hands of the board of trustees who have power to make all reasonable rules and regulations.

From the various provisions of the statutes above referred to, it will be seen that although a physician may have a right to treat patients in hospitals supported by public funds, this is always subject to such general rules and regulations as the governing body of the hospital may establish. The courts have usually held that the governing bodies of public hospitals are free to exercise their own judgment and perform their duties as such without dictation from any other branch of the government. Courts will not attempt to control matters within the discretion of the board. Stearns vs. Newport Hospital, 62 Atlantic, 132.

Among the reasonable rules which it has been held may be prescribed by the hospital board are those concerning the qualifications of physicians allowed to practice in the hospital.

The leading case upon this subject is Haymon vs. Galveston, 47 Supreme Court 363, which was decided by the United States supreme court. In this case the governing board of a hospital maintained by the city adopted a rule denying admission to a patient who wished to be treated by osteopaths and excluding osteopaths from practicing in the hospital. The constitution of Texas provides that, "no preference shall ever be given by law to any school of medicine." But the supreme court upheld the regulation excluding osteopaths.

In Newton vs. Board, 282 Pacific 1068, the supreme court of Colorado, following the decision in the Haymon case, said:

"A physician has no constitutional or statutory right to practice his profession in a county hospital. The county board has complete supervision and control of county hospitals in this state. A regulation excluding from the county hospital, or the right to practice therein, the devotees of some of the numerous systems or methods of treating diseases authorized to practice the profession in Colorado is neither unreasonable nor arbitrary. Some choice of methods necessarily exists, and we cannot say that in the case at bar the county board of commissioners did not have an adequate basis for its resolution. Neither can we say that this resolution was not justified upon the ground, which abundantly appears from this record, that, if the right to practice in the county hospitals is open to all the different schools of medicine, there would be constant jealousies and dissatisfaction between the rival schools of medicine which probably might or would greatly lessen the usefulness of the public hospital. The court cannot substitute its judgment for that of the county board. Not being contrary to any provisions of the federal *or state Constitution or of the laws of the state,* its determination cannot be set aside by us."

To the same effect is People vs. Julia F. Burnham Hospital, 71 Ill. App. 246; Harris vs. Thomas (Tex.), 217 S. W. 1068; People vs. Manhattan State Hospital, 39 N. Y. Sup. 158; State vs. Cincinnati, 23 Ohio St. 445; and Lambing vs. Twin Falls Co. (Idaho), 263 Pacific, 922.

The foregoing citations are included to indicate the general trend of the development of judicial opinion on the question under discussion.

Although the question has not been definitely decided in Indiana, these authorities satisfactorily establish the general principle that the governing board of a public hospital or of a private hospital receiving public aid may make rules which may operate to the exclusion of certain persons practicing under limited license or even of physicians practicing under an unlimited license, so long as the regulations from which the exclusion results are reasonable regulations fairly intended to accomplish the purpose of the hospital. The courts will not attempt to control discretion in matters of that kind but would interfere only where there was an obvious abuse of such discretion.

DEATH NOTES

GUSTAVE A. PETERSDORF, M.D., of Indianapolis, died December 1st, aged fifty-four years. Dr. Petersdorf had been in ill health and had retired from the active practice of medicine.

E. B. VINCENT, M.D., of Sunman, died November 23rd, aged seventy-nine years. Dr. Vincent had practiced in Sunman for fifty-seven years. He graduated from the Medical College of Ohio, Cincinnati, in 1873.

WILLIAM KELSEY, of Monterey, was killed instantly, December 2nd, when a passenger train struck his buggy at a grade crossing. Dr. Kelsey was ninety-six years of age. He graduated from the Indiana Medical College, Indianapolis, in 1874.

PORTER LINTHICUM, M.D., of Evansville, aged fifty-three years, died December 12th. Dr. Linthicum was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from Rush Medical College in 1908.

HARRY C. JOHNSON, M.D., of Logansport, died December 1st, aged fifty years. Dr. Johnson was a member of the Cass County Medical Society, the Indiana State Medical Association and a Fellow in the American Medical Association. He graduated in 1904 from the University of Illinois College of Medicine, Chicago.

NEWS NOTES AND PERSONALS

THE Noble County Medical Society met at Gawthrop Inn, Kendallville, December 9th.

DR. F. W. RATCLIFF, of Lafayette, and Miss Mary Holt, of Chalmers, were married December 20th.

DR. F. C. WALKER, of Indianapolis, has returned recently from a six weeks' vacation in California.

DR. H. O. BRUGGEMAN, of Fort Wayne, spent the holiday season in Los Angeles, California, visiting relatives and inspecting hospitals.

THE Hancock County Medical Society has changed the time of its regular meeting to the first Friday of each month.

HARRY ELLIOTT, M. D., of Brazil, has gone to Rochester, Minnesota, where he entered the Mayo Clinic for professional attention.

THE office occupied by Dr. T. S. Schuldt, of Pierceton, was almost completely wrecked by fire, water and chemicals, December 3rd.

DR. MILES F. PORTER, SR., of Fort Wayne, addressed the annual family and guest meeting of the Jay County Medical Society at Portland, December 5th.

THE Carroll County Medical Society held a meeting at Delphi, December 12th. Dr. W. W. Washburn and Dr. Russell Flack, of Lafayette, presented papers.

DR. JOSEPH L. ALLEN, of Greenfield, was elected state vice-commander of the Southern District of the American Legion for 1931 at the convention held in Fort Wayne.

THE Howard County Medical Society held a meeting at the Howard County Hospital, Kokomo, December 5th. Julia Davis talked about the Passion Play at Oberammergau.

DR. LOUIS SEGAR, of Indianapolis, talked on "Infant Care and Feeding" before the Dearborn-Ohio County Medical Society at the King Hotel, Lawrenceburg, December 4th.

THE Ohio, Indiana, and West Virginia Sectional Meeting of the American College of Surgeons will be held in Cincinnati, Ohio, January 19th to 20th, with headquarters at the Hotel Gibson.

THE fifteenth annual clinical session of the American College of Physicians will be held at Baltimore, Maryland, from March 23 to 27, 1931. The Lord Baltimore Hotel will be headquarters.

OFFICERS for the Fifth District Medical Society have been elected as follows: Dr. I. N. Casebeer, Clinton, president; Doctor Green, vice-president; and Dr. F. E. Sayers, Terre Haute, secretary-treasurer.

DR. H. G. HAMER, of Indianapolis, read a paper, "Some Present Day Problems in Renal and Ureteral Calculi," December 17th, before the Urological Branch of the New York Academy of Medicine.

DR. WILLIAM H. LARRABEE, past president of the Hancock County Medical Society and past president of the Sixth District Medical Society, was elected congressman of his district in the November election.

L. P. HARSHMAN, M.D., of Fort Wayne, addressed the Muncie Academy of Medicine at the January 6th meeting. His subject was, "Some Everyday Problems in Psychiatry."

DR. AND MRS. RICHARD STEPHENSON, of West Lebanon, Indiana, left January 1st for San Antonio, Texas, Los Angeles and San Francisco, California, and Bandon, Oregon. They will be away from home about three months.

THE Whitley County Medical Society held a dinner meeting at Columbia City, December 9th. Dr. E. V. Nolt presented a paper on "Fractures Below the Knee," and Dr. E. A. Hershey presented a paper on "Fractures of the Arm."

DR. WALTER H. NADLER, of the Northwestern University Medical School, Chicago, presented a paper on "Diabetes Mellitus" before the Northeastern Indiana Academy of Medicine at the Gawthrop Hotel, Kendallville, December 4th.

FIRE destroyed the beautiful country home of Dr. George D. Miller, of Logansport, at Pottowatomie Point, November 30th. The loss is estimated at about twenty thousand dollars. It is believed that defective wiring caused the fire.

DR. J. J. KIDDER, of Salamonia, was elected president of the Jay County Medical Society at the December 5th meeting. Dr. B. M. Taylor, of Portland, was made vice-president, and Dr. M. T. Jay, Portland, secretary.

DR. HAROLD M. TRUSLER, of Indianapolis, presented a paper on "Plastic Surgery Following Severe Burns" before the Knox County Medical Society at Vincennes, November 18th. The paper was unusually well discussed by the thirteen members present.

AT the December 4th meeting of the Wabash County Medical Society the following officers were elected for 1931: President, Dr. O. G. Brubaker, North Manchester; vice-president, Dr. F. M. Whisler, Wabash; secretary-treasurer, Dr. L. B. Rhamy, Wabash.

THE Terre Haute Academy of Medicine met at the Elks Club, January 2nd. Following dinner, Dr. E. J. McKesson, of Toledo, Ohio, presented a paper on "Nitrous Oxide Anesthesia" discussing the physiological action and practical application of the anesthetic.

AT the December 2nd meeting of the Indianapolis Medical Society case reports were presented by Dr. W. P. Moenning, Dr. H. H. Wheeler, Dr. J. B. Young, Dr. J. William Wright, Dr. Harry J. Weil, Dr. William N. Wishard, Jr., and Dr. J. H. Warvel.

DR. A. J. HOSTETLER, of Lagrange, was made president of the Northeastern Indiana Academy of Medicine, at a meeting held in Kendallville in December. Dr. W. F. Shumaker, of Butler, was made vice-president, and Doctor Black, of Ligonier, secretary-treasurer.

HOFFMANN-LAROCHE, INC., of Nutley, New Jersey, have extended their property by the purchase of ten additional acres of land, making a total tract of thirty-five acres. The purchase was deemed essential in the light of the company's steadily increasing sales.

THE Fifth District Medical Society and the Vigo County Medical Society held a joint meeting at Clinton, November 18th. Dr. F. W. Cregor, of Indianapolis, presented a talk dealing with the relationship of the Indiana State Medical Association to the profession.

AT the regular monthly meeting of the Vanderburgh County Medical Society, held December 9, 1930, the following officers were elected for 1931: President, Dr. I. C. Barclay; vice-president, Dr. H. L. Stanton; secretary-treasurer, Dr. Keith T. Meyer; delegate to the state convention, Dr. L. E. Fritsch; censors, Drs. G. C. Johnson, R. W. Viehe, and W. R. Davidson.

OFFICERS were elected for 1931 at the December 10th meeting of the Jennings County Medical Society, held at North Vernon. Dr. J. H. Green, of North Vernon, was made president, Dr. William H. Stemm, of North Vernon, vice-president, and Dr. D. L. McAuliffe, North Vernon, secretary-treasurer.

AN early announcement has been mailed concerning tentative information about the seventh annual European assembly of the Interstate Postgraduate Medical Association of North America, May 10 to July 11, 1931. Information concerning this assembly may be obtained from Dr. William B. Peck, Freeport, Illinois.

THE Fountain-Warren County Medical Society held a meeting at Attica, December 4th. Dr. A. M. Miller, of Danville, Illinois, reported eight successful Ramstedt operations for congenital pyloric stenosis. Dr. E. G. C. Williams, of Danville, Illinois, talked on the treatment of granulation in old ulcers with pari-thio-cresol.

DR. E. E. HOLLAND, H. E. Allen, J. M. Fouts, and A. J. Whallon presented a symposium on "Medical Socialism" under the following headings: "World Situation; in the United States; in Indiana; and Local Aspects," before the Wayne-Union County Medical Society at Richmond, December 11th. Officers were elected for 1931.

IN a most remarkable community meeting, the citizens of Newton county and more especially of the town of Brook, attended a celebration in honor of the sixty-eighth birthday of Dr. T. E. Collier, of Brook. More than six hundred people attended. Dr. Collier has practiced medicine in the community of Brook for thirty-five years.

DR. CLARENCE A. NEYMANN, professor of psychiatry at Northwestern University Medical School, talked before the LaPorte County Medical Society, at the Spaulding Hotel, Michigan City, December 18th. He presented a resume' of the mental diseases encountered by the general practitioner, their various symptoms and their treatment.

DR. M. W. LYON, JR., South Bend, was made president of the St. Joseph County Medical Society at the December 2nd meeting. Other officers elected were Dr. J. V. Cassidy, vice-president; Dr. R. B. Dugdale, secretary and treasurer, and Dr. Martha Lyon, assistant secretary and treasurer.

THE U. S. Civil Service Commission announces open competitive examination for senior medical technician (roentgenology). Colored eligibles are wanted for Veterans' Hospital, in Tuskegee, Alabama. Applications must be on file with the commission at Washington, D. C. (from where complete information may be obtained), not later than January 28, 1931.

ANNOUNCEMENT has been made of the appointment of two new consultants of the Committee on the Costs of Medical Care. They are Dr. John M. T. Finney, of Baltimore, professor of clinical surgery in the medical school of Johns Hopkins University, and Dr. David Riesman, of Philadelphia, professor of clinical medicine in the medical school of the University of Pennsylvania.

THE Kosciusko County Medical Society held its regular meeting at Warsaw, December 16th. Case reports were presented by Doctors Howard, Anglin, Baum, Herring, DuBois and Richer. At this meeting officers were elected for 1931, as follows: President, Dr. G. N. Herring, Pierceton; secretary-treasurer, Dr. C. C. DuBois, Warsaw; delegate to state convention for two years, Dr. C. N. Howard, Warsaw.

THE combined seminar of the Indiana University School of Medicine for November and December was held in the auditorium of the medical school building, Indianapolis, December 12th. Cases were presented by Drs. Edward G. Billings, Frank Ramsey, George Garceau, Dwight DeWees, and Herbert Call. Papers were presented by Drs. Burton D. Myers and W. D. Little. A social hour followed the program.

THE Cass County Medical Society held its regular meeting at Logansport, November 20th. Dr. W. W. Holmes, Dr. B. W. Egan, Dr. Earl Palmer and Dr. John Bradfield were the speakers. The December meeting of the Cass County Medical Society was held at Logansport, December 18th. Dr. J. H. Reed presented a paper on "Ethics in Medicine," and Dr. Thomas Cooper talked on "Congenital Hypertrophic Stenosis—Operative Technique."

THE total budget request for the Indiana State Board of Health for the next two years is $393,480, or an increase of $43,000 over the amount granted two years ago. Doctor King explained that the increased salaries are necessary in order to keep competent assistants in the department. Among increases sought is a $1,000 increase for Doctor King, $1,000 for V. K. Harvey, assistant secretary, and $500 for C. F. Adams, laboratory director.

OFFICERS of the Indiana Academy of Ophthalmology and Otolaryngology for 1931 are Dr. John W. Carmack, Indianapolis, president; Dr. B. E. Ellis, Indianapolis, first vice-president; Dr. Carroll O'Rourke, Fort Wayne, second vice-president; Dr. J. K. Leasure, Indianapolis, secretary-treasurer; and Drs. H. A. VanOsdol, Indianapolis, and W. F. Hughes, Indianapolis, members of the council. Terre Haute will be the place of meeting for the 1931 session.

BY the death of Hannah J. Loring, widow of Dr. D. J. Loring, former practicing physician and surgeon of Valparaiso, the sum of approximately $24,000 will be available for the establishment of an institution as a memorial to Doctor Loring. The fund is to be used for establishing a hospital, orphanage, old people's home or an institution for the aid of neglected and dependent children. The Thrift Trust Company, trustee, is given authority to determine the disposition of the fund.

IN an endeavor to make available the world's literature pertaining to cancer, The Chemical Foundation is collaborating with The American Association for Cancer Research and The American Society for the Control of Cancer in the publication of *The American Journal of Cancer* which will replace *The Journal of Cancer Research*. The Chemical Foundation also is cooperating with the Radiological Society of North America in enlarging its official publication, *Radiology*.

THE U. S. Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer, in general medicine and surgery. Applications for these positions will be rated as received by the U. S. Civil Service Commission at Washington, D. C., until June 30, 1931. Examinations are to fill vacancies in the departmental service, veterans' bureau, public health service, Indian service, coast and geodetic survey, and Panama canal service.

ACCORDING to a news story in the *Indianapolis Star,* Dr. William J. Carter, of that city, recalls Thanksgiving Day seventy-five years ago, and says that they had just about as good a time in those days as the modern generation does now. Doctor Carter recalls taking into the village of Indianapolis (seventy-five years ago) a wagon load of produce, and selling eggs at ten cents a dozen, potatoes and apples at twenty-five cents per bushel. Doctor Carter is ninety-one years old, and resides in the Denison Hotel in Indianapolis.

THE Tippecanoe County Medical Society met at the Lafayette Home Hospital, Lafayette, December 11th. Mrs. George A. Shepard spoke on "What Physicians' Wives Can Do for the Profession." This was the annual business and social meeting. Bridge was played at the nurses' home following the business meeting. Attendance was sixty. Four new members were voted membership in the Society, making the total for the year thirteen. Two members were lost by death, and four were transferred. Total membership of the Society now is eighty-one.

THE Indianapolis Ophthalmological and Otolaryngological Society has published its program for the season of 1930-1931. At the January 8th meeting Dr. Lawrence T. Post, of St. Louis, presented a paper. On February 12th, Dr. Robert Sonnenschein, of Chicago, will be the speaker; on March 12th, Dr. Sanford R. Gifford, of Chicago; on April 9th, Dr. B. J. Larkin and Dr. F. V. Overman, of Indianapolis; on May 14th, Dr. Burt R. Shurly, of Detroit. Officers of this society are: Dr. E. L. Lingeman, president; Dr. J. C. Daniel, vice-president; and Dr. Kenneth L. Craft, secretary-treasurer.

A MEETING in memory of the late Dr. Thomas W. Salmon, former professor of psychiatry of Columbia University and medical director of the National Committee for Mental Hygiene, was held at the New York Academy of Medicine, Fifth Avenue and 103rd Street, New York City, January 10th. A sum of $100,000 has been subscribed by friends and admirers of Dr. Salmon, for the creation of an endowment fund, the income from which is to be devoted to an annual lecture or series of lectures to be known as the Thomas W. Salmon Memorial Lectures, to be given by authorities in psychiatry and mental hygiene for the advancement of knowledge in these fields.

OFFICERS for the Indianapolis Medical Society for 1931 are as follows: President, E. D. Clark, M.D.; first vice-president, E. O. Asher, M.D.; second vice-president, H. F. Nolting, M.D.: secretary-treasurer, Chester A. Stayton, M.D.; delegates, Henry Leonard, M.D., Max Bahr, M.D,. and Harry K. Langdon, M.D.; Council, Ralph Lochry, M.D., and Elmer Funkhouser, M.D. The Indianapolis Medical Society is sponsoring a medical society bowling league, following a motion passed December 2, 1930. The committee, appointed by the president, consists of Dr. J. H. P. Gauss, M.D., chairman; H. W. Kuntz, M.D., secretary-treasurer; and Kenneth Craft, M.D., John W. Emhardt, M.D., and Clark W. Day, M.D. Temporary meeting place for the bowling league will be at the Antlers Hotel.

THE American Board of Obstetrics and Gynecology, composed of nine members and examiners elected by the American Association of Obstetricians, Gynecologists and Abdominal Surgeons, the American Gynecological Society and the Section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, was formally organized in Niagara Falls, September 16, 1930. The function of the board is to grant certificates indicating proficiency and specialization in obstetrics or gynecology, or both, to those who comply with its requirements. This board has been in process of organization since 1927, and puts into action a determined effort on the part of these three national organizations to improve the standards of practice of obstetrics and gynecology. The board does not intend in any way to interfere with or limit the professional activities of any duly licensed physician, but it does aim toward standardized qualifications for specialists in obstetrics and gynecology. Any well-qualified gynecologist should have no difficulty in obtaining a certificate and the board is desirous of receiving applications from those to whom this applies. The first examination for candidates will be held simultaneously in nineteen different cities of this country and Canada on Saturday, March 14, 1931. Detailed information and application blanks may be secured from Dr. Paul Titus, secretary, 1015 Highland Building, Pittsburgh, Pennsylvania.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Gold Sodium Thiosulphate—Abbott.

Eli Lilly & Co.:

Erysipelas Antistreptococcic Serum — Lilly (Concentrated Globulin).

Medical Arts Laboratory, Inc.:

Antirabic Vaccine, Semple Method.

National Drug Co.:

Antipneumococcic Serum, Type I.
Ointment Scarlet Red Biebrich 8 Per Cent.
Typhoid-Paratyphoid A Vaccine.

Parke, Davis & Co.:

Ventriculin.

Richards Pharmacal Co., Inc.:

Richards Psyllium Seed.

E. R. Squibb & Sons:

Diphtheria Toxoid-Squibb, twenty 1 cc. ampule packages.

Diphtheria Toxoid-Squibb, two 1 cc. ampule packages.
Normal Horse Serum, one 50 cc. vial package.
Ragweed Pollen Allergen Solution-Squibb (3 vial treatment package).
Timothy Pollen Allergen Solution-Squibb (3 vial treatment package).

INDIANA UNIVERSITY NEWS NOTES

ON December 9th Dr. B. D. Myers, dean of the Indiana University medical school at Bloomington, spoke to the students of the I. U. medical school at Indianapolis on "The Sympathetic Nervous System."

STUDENTS of the Indiana University school of medicine at Indianapolis were entertained at a dance Friday night, November 21st, in the medical school building by members of the university training school for nurses.

DR. E. T. THOMPSON, administrator of the Indiana University medical center, Indianapolis, spoke on the James Whitcomb Riley Hospital for children before Indiana University students at Bloomington Tuesday, December 2.

THE Ball residence which houses the majority of undergraduate students and a number of graduates of the Indiana University training school for nurses has been presented a radio by the senior class of the training school.

DR. CHARLES P. EMERSON, dean of the Indiana University medical school at Indianapolis, was re-elected president of the national committee for mental hygiene at the 21st anniversary meeting of the committee held November 14th in New York City.

THE officers for the freshman class of the Indiana University medical school at Bloomington are as follows: Ralph Blackford, Middletown, Ohio, president; Earl Mericle, Bargersville, vice-president, and Fred Malott, Converse, secretary-treasurer.

MEMBERS of the Indiana University school of medicine at Bloomington defeated their rivals, the law students, 6-0 in the annual medic-law football game last month. The medics held "last rites" over the laws at Homecoming when Northwestern played Indiana at Bloomington.

DR. E. T. THOMPSON, administrator of the Indiana University medical center, Indianapolis, spoke December 17th, before a combined Kiwanis and Rotary luncheon. On December 29th, Dr. Thompson spoke before the Rotary Club of Fort Wayne. His talks were on the services of the Riley Hospital.

SICK children of the James Whitcomb Riley hospital were entertained Tuesday, December 2nd, by a performing chimpanzee, Joe Mendi, II, more familiarly known as "Buster." Joe was dressed in the latest college cut clothes. He appeared at the Riley hospital under auspices of the W. H. Block Company.

AT present thirty-nine different hospitals over the country have serving as internes eighty-six graduates of the 1930 class of the I. U. school of medicine. Many of these positions are won by competitive examination in which the graduates of all medical schools may enter. Other hospital interneships are obtained by appointment.

FIVE members of the Indiana University medical school faculty spoke at the meeting of the Indiana society for mental hygiene which was held at the Claypool Hotel, Indianapolis, December 9th. They were Dr. Frank Hutchins, Dr. Thurman B. Rice, Dr. Mary H. Young, Dr. Charles Emerson, and Dr. Helen P. Langner.

THE members of the active chapter of Phi Beta Pi, medical fraternity at the Indiana University school of medicine, were entertained Wednesday evening, December 17th, with a banquet by the physicians and alumni members of the fraternity. The banquet was held at the Severin Hotel. Dr. R. A. Soloman is president of the alumni organization and Gayle Hunt of the active chapter.

MEDICINE is third in a list of twenty-six occupational fields pursued by 11,275 graduates of Indiana University, according to a survey which has been completed by the office of the register of graduates. Education has the first claim on the time of I. U. graduates, with 4,072 graduates engaged in that profession. Homemaking comes second with 1,584 graduates and medicine third with 1,383. Dentistry is fourth with 848.

ALUMNI and pledges of Phi Delta Epsilon, professional medical fraternity at the Indiana University school of medicine, were guests of the active chapter at a dinner Saturday night, December 13th, at the Spink-Arms Hotel, Indianapolis. More than thirty-five persons attended. The speakers were Dr. Jacob K. Berman, Dr. A. S. Jaeger, and Dr. Sidney S. Aronson, all members of the medical school faculty at Indianapolis.

THE American Dietetic Association inspected the dietetic department of the Indiana University medical center Monday and Tuesday, December 8th and 9th. The inspection was under the direction of Miss Ruth Cooley, vice-president of the association. The association is conducting an inspection of all accredited dietetic schools and this

was the first inspection. It is the plan of the association to conduct these tours of inspection once a year, basing the rating of the school on the findings of the inspection committee.

EIGHT different class A medical schools of the country have graduates as internes and resident physicians and surgeons on the staff of the I. U. medical center. At present, the I. U. hospitals, including the Robert W. Long Hospital, the James Whitcomb Riley Hospital, and the William H. Coleman Hospitals, provide seventeen interneships and fifteen positions as resident physicians, a total of thirty-two. Seven are held by graduates of universities other than Indiana University, and twenty-five positions are held by graduates of the I. U. School of Medicine.

SEVEN Indiana institutions of higher learning are among the leading contributors to the list of 16,433 notables listed in "Who's Who in America," scientific biographical dictionary containing the life sketches of outstanding figures in American life. Indiana University stood 18th in the list with 178 alumni. The other six Indiana universities and colleges and their respective standing were as follows: DePauw, 36th, with 95 alumni represented; Earlham 73rd, with 50 alumni; Wabash 77th, with 48; Valparaiso 98th, with 35; Franklin 100th, with 34, and Hanover 122nd, with 25 alumni represented.

DR. GEORGE GARCEAU, resident in orthopedics at the Riley Hospital; Dr. E. T. Thompson, administrator of the Indiana University medical center, Indianapolis; and W. E. Palmer, head of the Riley brace shop, have visited the Kosair Crippled Children's hospital at Louisville, Kentucky, to inspect the brace shop in that hospital. The visit was made with the idea of getting information which may be utilized for the improvement of the Riley brace shop. The Kosair hospital is the Louisville Shriners' hospital, a sixty-bed hospital established in 1926 for the care of crippled children from two to fourteen years old.

THE William H. Coleman Hospital at Indianapolis, which is part of the Indiana University medical center, reports a "bumper" crop of babies. Originally built and staffed to care for eighty or ninety new infants a month, the hospital finds more than that number on its hands regularly. The new high level came in November when 124 babies were born in the hospital. In November, 1929, only seventy-eight babies were born. For a six months' period starting in June, 1930, the monthly average was 103 babies per month as compared with 77.5 babies per month during the corresponding period of 1929.

PATIENTS in the Riley, Coleman, and Long Hospitals, as well as the nurses of the Indiana University medical center, Indianapolis, were well taken care of during the holidays in the round of Christmas entertainment.

The annual Christmas party for children in the Riley Hospital was held Wednesday, December 24th, with the hospital committee of the Junior League of Indianapolis in charge. The entertainment consisted of vaudeville acts, including one in which eighteen white dogs took part, also a musical and clown act. Santa Claus ice cream molds and cake were served the children at the party, which was held in the occupational therapy room of the hospital. Favors were presented each child.

Each child made known his first and second choice of presents to members of the occupational therapy department and in every way possible these wishes were gratified. Money for the presents comes from a special donation which the occupational therapy department receives annually at Christmas time.

The patients of the Robert W. Long Hospital were given a party Tuesday afternoon, December 23rd, which was provided for by a gift from the late Dr. Frank A. Morrison. Ice cream and cake were served to the patients of the hospital.

Christmas morning gifts were distributed to all patients in the Coleman Hospital for women by the student nurses of the hospital under the direction of Miss Elizabeth Brown, R. N., superintendent, and her assistant, Miss Anna Yelton, R.N. The Kappa Alpha Theta alumnæ society of Indianapolis had charge of the Christmas activities of the Coleman Hospital. In addition to the gifts to the mothers, useful gifts were provided for each baby.

Tuesday evening, December 23rd, the nurses of the I. U. training school held their Christmas party at the Ball residence for nurses. The program consisted of stunts by each class of nurses. The student nurses exchanged presents. Refreshments were served.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION
THE COUNCIL

The regular midwinter meeting of the Council of the Indiana State Medical Association was called to order by E. E. Padgett, of Indianapolis, chairman, at 10:15 a. m. Wednesday, December 3, 1930, at the Indianapolis Athletic Club, Indianapolis. Roll call showed the following present:

Officers:

A. C. McDonald, president 1930.
A. B. Graham, president 1931.
F. S. Crockett, president-elect 1932.
Wm. A. Doeppers, treasurer.
A. E. Bulson, editor of THE JOURNAL.

Members of the Council:

1st District—John H. Hare, Evansville.
2nd District—H. C. Wadsworth, Washington.
3rd District—Walter Leach, New Albany.
4th District—H. P. Graessle, Seymour.
5th District—O. O. Alexander, Terre Haute.
6th District—B. G. Keeney, Shelbyville.
7th District—E. E. Padgett, Indianapolis.

8th District—M. A. Austin, Anderson.
9th District—F. T. Romberger, Lafayette.
10th District—E. M. Shanklin, Hammond.
11th District—Not represented by active councilor.
12th District—Not represented.
13th District—J. B. Rogers, Michigan City.

Retiring Councilors:

2nd District—G. D. Scott, Sullivan.
11th District—Ira E. Perry, North Manchester.
Albert Stump, attorney for the Association.
Thomas A. Hendricks, executive secretary.

The reading of the minutes of the Council meetings held at Fort Wayne during the annual session last September was dispensed with as these minutes were printed in the October number of THE JOURNAL and approved. Doctor Hare asked that a correction be made in the roll call for the second meeting of the Council last September to show that he was present.

In his opening statement Doctor Padgett made a short comment upon the coming session of the legislature.

Reports of Councilors by Districts

The short, informal reports of the councilors show that conditions were good from a medical organization standpoint in each district. Doctor Leach reported that conditions in the Third District were better than ever before, due to a reconciliation between two groups in one of the important counties in his district. Doctor Padgett spoke of the unusual interest displayed at the fall meeting of the Seventh District Medical Society with several nationally known outstate speakers on the program, headed by Dr. Edward Starr Judd, of Rochester, Minnesota, president-elect of the American Medical Association.

Doctor Romberger spoke of the gain in membership in the Ninth District Society and the fact that the Ninth District Society was looking forward with unusual interest to its 1931 meeting, which is to be held in Boone county. Doctor Romberger reported that the interest in medical organization had increased materially in the last year in Boone county, which previously had been in more or less of a dormant state.

Doctor Rogers reported that the Thirteenth District meeting at Mishawaka was most excellent and invited all members of the State Association to attend next year's meeting at Warsaw. He reported that the LaPorte County Medical Society desired some legislation to relieve hospitals and doctors from unpaid bills in hospital accident cases. He suggested that legislation be enacted making all drivers have a physical examination and carry insurance. He also spoke of the fact that he believed all State Association sessions should be held in Indianapolis. "In no place in the state are clinical arrangements as good as at Indianapolis."

Doctor Perry, retiring councilor of the Eleventh District, reported that the district society was living up to its slogan, "The best in the state."

Reports of Officers

Doctor McDonald, retiring president; Doctor Graham, president 1931; Doctor Crockett, president-elect, and Doctor Bulson, editor of THE JOURNAL, stated that they had no special report to make at this time. Doctor Doeppers, treasurer, gave the following treasurer's report:

Application of Funds Jan. 1 to Dec. 1, 1930

INCOME

Membership dues, 2,736 members (7, 1929 memberships)	$19,152.00	
Income from exhibits	3,020.00	
Interest on certificates of deposit	922.50	
Interest on checking account	191.76	
Interest on Liberty Bonds	212.50	
Interest on realty bonds	180.00	
Total income for period		$23,678.76

EXPENDITURES

Executive secretary's office	$10,218.42	
Refund of dues	14.00	
Loss of dues acct. bank closing	7.00	
Publicity committee	401.08	
Public policy	6.00	
THE JOURNAL	5,468.00	
Misc. committees	1,153.98	
Council	149.39	
Officers	159.00	
Annual session	2,467.90	
Attorney	366.63	
Medical defense	50.00	
Accrued interest on bonds	1,027.71	
Total expenditures		21,489.11
Net income for the period Jan. 1 to Dec. 1, 1930		$ 2,189.65
Surplus at January 1, 1930		28,037.02
Surplus at November 30, 1930		$30,226.67

Analysis of Surplus Account at Nov. 30, 1930

Liberty Bonds held in Safety Deposit Box (4¼%)	$ 5,000.00
Real Estate Bonds in Safety Deposit Box (6%)	5,000.00
State Highway Aid Bonds in Safety Deposit Box (5%)	2,000.00
City Hospital Bonds in Safety Deposit Box (1 at 4¾%; 5 at 4%)	6,000.00
Flood Prevention Bonds in Safety Deposit Box (4¼%)	5,000.00
School Improvement Bonds in Safety Deposit Box (4½%)	5,000.00
Checking Account Balance at Continental National Bank	2,026.67
Petty Cash Acct. Bal. in Bankers Trust Co.	200.00
	$30,226.67

Upon the motion of Doctor Shanklin this report was accepted with the understanding that it be subject to the usual annual audit. Doctor Doeppers stated that this annual audit is made always before the annual session in September. For several years past an additional audit has been made the first of each year. Doctor Doeppers explained that the Executive Committee at its regular monthly meeting in November ruled that this second audit was not necessary.

Unfinished Business

1. *Ninth District Case.* The executive secretary reported that despite the action of the Council at the Fort Wayne session no dues had been received at headquarters office from the secretary of the ____ County Medical Society for Doctor ____. Following the Fort Wayne session the executive secretary reported that a letter had been sent to the secretary of the ____ County Medical Society containing the instructions of the Council in this matter. The executive secretary reported that he had received no answer to that letter. Following a general discussion Doctor Shanklin made the following motion: "I move that this matter be re-referred to the councilor of the Ninth District with the express wish of the Council that this matter be adjudicated before December 31, 1930, and that it be the sense of this Council that Dr. ____ is a member in good standing in the ____ County Medical Society at this time." Seconded and carried. Preceding this motion Doctor Bulson suggested that the Council take some action urging the discontinuance of distasteful publicity on the part of individual physicians. Doctor Bulson said that newspaper editors as a whole are very glad to cooperate with the medical men in this respect. During the discussion the point was brought out that the State Association was not responsible for the actions of a local county medical society secretary, as the secretary was not an agent of the State Association but was chosen by the local medical society of which he is an officer.

BOSTON MEDICAL LIBRARY LIBRARY

2. *Report of Special Committee Composed of Doctors Keeney, Padgett and Shanklin.* Doctor Keeney, the chairman, made a verbal report stating that a contract had been made in 1907 between the editor of THE JOURNAL and the Council, and that this contract had been renewed in 1912 and 1925. Doctor Keeney said that Doctor Wishard had prepared a letter which substantiated these facts. This letter had been read before the Special Committee but had been mislaid by Doctor Keeney and was not read before the Council. However, Doctor Keeney expressed the desire that it appear in the Council minutes. Doctor Wishard's letter follows:

"To the Council of
The Indiana State Medical Association,
Indianapolis, Ind.:

"Gentlemen:

"During a recent conference with one of the present members of the Council and myself it was suggested that it would be desirable for me as chairman of the Council during the first twelve years of its existence to make a brief statement as to the establishment of the present JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

"Briefly the facts are as follows: The House of Delegates, having previously directed the Council to obtain an expression from the different county societies, and sixty-three counties having voted for the establishment of a journal and only eight having voted to retain the old *Transactions*, it was decided at a special session of the Council on October 15, 1907, to establish a journal.

"The Council was confronted by the fact that the Indiana State Medical Association had no funds and no financial standing except as it might be guaranteed by individuals. The Council had no knowledge of the expense of establishing a journal and after prolonged discussion of the matter Doctor Bulson was asked on what conditions he would establish a journal to be known and owned by the Indiana State Medical Association, and yet to involve no financial obligation on the part of the Association in the event of a financial failure. Doctor Bulson finally agreed to assume all expenses of publication and distribution of THE JOURNAL and to accept 75 cents annually from each member of the Society, and the remainder to be made up by advertising and other sources. No written contract was drawn and signed by the Council and Doctor Bulson jointly, but the foregoing conditions were embodied in a resolution to which Doctor Bulson gave his assent. While the matter was in a sense a joint agreement between the Council and Doctor Bulson, based upon the resolution passed, it was nevertheless a binding contract on its acceptance and fulfillment by Doctor Bulson and the Council. This acceptance and fulfillment of the agreement has been faithfully kept by both parties, and has been confirmed from year to year by the House of Delegates. The price of THE JOURNAL to the members of the State Association has been raised from the original sum and it is now two dollars, and the increase has been made from time to time because of the doubling and trebling of the cost of production of THE JOURNAL. At present there probably goes into the mechanical make-up of THE JOURNAL four or five times as much expense as the actual cost at the time THE JOURNAL was started.

"The original agreement was, as shown by the records of the Council of October 15, 1907, and confirmed from year to year by the Council and the House of Delegates, and involved the appointment of Doctor Bulson as editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, the appointment to continue until his successor was appointed, and he required to furnish a journal of definite size, make-up and character.

"It is common comment in the American Medical Association circles outside of Indiana that Indiana has the best state journal in the United States, and that Doctor Bulson has shown outstanding ability in the editorial and business management of Indiana's journal. THE JOURNAL is quoted in state and other journals all over the United States, including even dental journals.

"Doctor Bulson has, for twenty-three years, faithfully lived up to his part of the original agreement, and has greatly added to the honor and prestige of the Indiana State Medical Association, by his able editorial management of THE JOURNAL.

"Dr. Walter J. Leach, Dr. W. R. Stemm, Dr. Joseph H. Weinstein, Dr. D. W. Stevenson, Dr. Charles H. McCully and the undersigned were members of the Council which made the original contract with Doctor Bulson. Some of the members then present have passed away. At a meeting of the Council recorded in THE JOURNAL of November, 1925, page 438, Doctor Davidson made a motion formally reaffirming and renewing the contract with Doctor Bulson, making the motion merely as a matter of record, as some members of the House of Delegates and Council desired information about the agreement. Doctor Davidson's motion was seconded by Doctor Weinstein and unanimously carried by the meeting of the Council above referred to.

Respectfully submitted,
(Signed) "WM. N. WISHARD."

Doctor Romberger moved that the report of the committee be accepted and that the committee be honorably discharged. Seconded and carried. Doctor Rogers moved that in view of the fact that the Council had an indefinite contract with the editor of THE JOURNAL a new contract should be drawn. Motion lost because of a want of a second. The question of the creation of a Publication Committee and of the editor of THE JOURNAL making a detailed financial report annually commented upon by Doctor Shanklin and Doctor Bulson. No action taken in the matter by the Council. Upon the motion of Doctor Austin, seconded by Doctor Graessle, a vote of confidence was given to Doctor Bulson for his work as editor of THE JOURNAL.

Suggestions and Proposals for 1931 Session at Indianapolis

1. *Proposal for General Program.* The Council went on record at the Fort Wayne session, approving the suggestion of the president-elect, Dr. A. B. Graham, that section meetings be done away with at the 1931 session and that all scientific meetings be general in character. Doctor Graham said that letters had been sent to the various section officers asking them for their opinion as to a general meeting. He reported that the only complaint concerning a general meeting came from the officers of the ear, eye, nose and throat section.

2. *Scientific Exhibit.* Upon the motion of Doctor Shanklin, seconded by Doctor Wadsworth, the Council went on record favoring the continuation of the scientific exhibit, and an allowance by the Budget Committee of funds to cover the expenses of such an exhibit. The cost of the scientific exhibit at Fort Wayne was $241.15.

3. *Employment of Professional Medical Stenographers.* Doctor Romberger moved that professional medical stenographers be employed for the 1931 session. Motion seconded and carried. The cost of these stenographers at the 1930 session was $314.10.

Mr. Hendricks, the executive secretary, made a brief report concerning what has been done about arrangements for the Indianapolis session for 1931. He said that representatives of local groups upon which fall the responsibility of making the arrangements had held a meeting which resulted as follows: Nine places were suggested as convention headquarters, though it was suggested that either the City Hospital or the Indiana University School of Medicine would be almost ideal, both from scientific meeting and exhibit standpoints. Formal invitations have been received from both institutions.

According to the wish of the Council it is proposed that the session cover a three-day session with no section meeting. Program is to be made up entirely of Indiana talent with some men of national reputation to address the evening meeting. The tentative program as proposed is as follows:

Wednesday Morning—Registration and golf.

Wednesday Noon—Golf luncheon; Council luncheon.

Wednesday Afternoon—House of Delegates' meeting; ladies' reception.

Membership Report

NOVEMBER 30, 1930

COUNTY SOCIETY	Nov. 30, 1930	Nov. 30, 1929	Gain — Loss	Delinquents	New Members	Removals	Deceased	Reinstatements
First District:								
Posey	12	13	—1	3		1	1	
Vanderburgh	93	99	—6	12	6	2	2	
Warrick	9	9		2			1	1
Spencer	10	10		3	1	1		
Perry	10	10		1				
Gibson	21	22	—1	3	2	1		
Pike	7	7			1		1	
Total	162	170	—8	24	10	5	5	1
Second District:								
Knox	32	33	—1	7		2	2	
Daviess-Martin	24	24		2	2	2		
Sullivan	21	20	1		2	1		
Greene	13	13		7	1		2	
Owen	6	8	—2	1				
Monroe	28	24	4	1	2	4		1
Total	124	122	2	18	7	9	4	1
Third District:								
Lawrence	23	24	—1	1			1	
Orange	17	17		2	2	2		1
Crawford	4	4		2				
Washington	8	8					2	
Scott	3	3						
Clark	18	17	1		1	1		1
Floyd	38	30	8	1	6			1
Harrison	6	6		1		1	1	1
Dubois	14	14		2				
Total	131	123	8	9	9	4	4	4
Fourth District								
Brown								
Bartholomew	24	22	2	2	1		1	1
Decatur	16	17	—1	1			1	
Jackson	20	19	1					
Jennings	11	10	1					
Ripley	12	10	2	3	2	2	1	
Jefferson	16	18	—2	2		1	2	
Switzerland	6	7	—1					
Dearborn-Ohio	18	20	—2					
Total	123	123		8	3	3	5	1
Fifth District:								
Parke-Vermilion	13	15	—2	5		1	1	1
Putnam	15	15			1		1	
Vigo	118	120	—2	2	5	5	4	2
Clay	18	16	2	3	1			2
Total	164	166	—2	10	7	6	6	5
Sixth District:								
Hancock	17	16	1	2	2		1	
Henry	26	27	—1	3	1	4	1	1
Wayne-Union	50	48	2	5	3	4		1
Fayette	12	12		1				
Rush	23	20	3		1		1	1
Shelby	17	20	—3	9			1	
Franklin	6	6						
Total	151	149	2	20	7	8	4	3
Seventh District:								
Hendricks	18	17	1		1	1	1	
Marion	471	471		28	17	10	13	1
Morgan	23	20	3	4	1		1	1
Johnson	10	10		5			2	
Total	522	518	4	37	19	11	17	2
Eighth District:								
Madison	61	59	2	10	4	1	1	1
Delaware - Blackford	66	66		9	4	4	3	
Jay	14	13	1	4				1
Randolph	23	23		2	1		2	2
Total	164	161	3	25	9	5	6	4

COUNTY SOCIETY	Nov. 30, 1930	Nov. 30, 1929	Gain — Loss	Delinquents	New Members	Removals	Deceased	Reinstatements
Ninth District:								
Benton	12	12						
Fountain - Warren	20	22	—2	1		1	1	1
Tippecanoe	78	72	6	1	6	2	1	1
Montgomery	29	27	2	4	2	2		
Clinton	20	22	—2	5		1	2	
Tipton	8	9	—1	3		1		
Boone	12	9	3	3	2	2		3
Hamilton	22	22		2	1		3	
White	8	8		2	2	4		
Total	209	203	6	21	13	13	7	5
Tenth District:								
Lake	191	198	—7	21	5	8	5	2
Porter	20	19	1	1	1	1	3	
Jasper - Newton	17	18	—1	3				
Total	228	235	—7	25	6	9	8	2
Eleventh District:								
Carroll	19	20	—1				1	
Cass	37	37		3	2	1	3	3
Miami	21	24	—3	4			1	
Wabash	28	27	1	3	2	2		1
Huntington	25	25		1	2		2	
Howard	35	39	—4	1	1	1	4	
Grant	37	42	—5	5		4	1	
Total	202	214	—12	17	7	8	12	4
Twelfth District:								
LaGrange	12	14	—2	1		2		
Steuben	12	13	—1	1				1
Noble	25	24	1		3	1	1	1
DeKalb	22	21	1	2	1	2		1
Whitley	10	11	—1	1			2	
Allen	138	133	5	7	5	15	1	
Wells	16	18	—2	3	1	1	1	
Adams	19	19		2	1	1	1	
Total	254	253	1	17	11	22	6	3
Thirteenth District:								
LaPorte	46	48	—2	2	2	2	1	1
St. Joseph	138	134	4	2	5	4	4	
Elkhart	71	71		2	3			1
Starke								
Pulaski	2	4	—2	7				
Fulton	19	18	1	4	2		1	
Marshall								
Kosciusko	17	18	—1	2			1	
Total	293	293		19	12	6	7	2

SUMMARY BY DISTRICTS

1st District	162	170	—8	24	10	5	5	1
2nd District	124	122	2	18	7	9	4	1
3rd District	131	123	8	9	9	4	4	4
4th District	123	123		8	3	3	5	1
5th District	164	166	—2	10	7	6	6	5
6th District	151	149	2	20	7	8	4	3
7th District	522	518	4	37	19	11	17	2
8th District	164	161	3	25	9	5	6	4
9th District	209	203	6	21	13	13	7	5
10th District	228	235	—7	25	6	9	8	2
11th District	202	214	—12	17	7	8	12	4
12th District	254	253	1	17	11	22	6	3
13th District	293	293		19	12	6	7	2
Total	2727	2730	—3	250	120	109	91	37

Total members December 31, 1929 2740

(These figures are for eleven months only. It is reasonable to expect that at least six more memberships will come in between now and the first of the year.)

Wednesday Night—Smoker, entertainment and theater party; ladies' entertainment.

Thursday Morning—Opening of scientific meeting; Auxiliary breakfast and meeting.

Thursday Noon—Class luncheons, smokers, get-togethers, etc.

Thursday Afternoon—General scientific meeting.

Thursday Evening—Banquet with nationally known speaker.

Friday Morning—House of Delegates' breakfast; second Council meeting; final general scientific meeting.

A canvass shows that twenty-seven hotels and apartments, each housing from one hundred to one thousand guests, offer ample accommodations for visitors. In addition to single and double rooms either with or without bath, most hotels can provide suites at prices in keeping with their other rates.

Ample facilities and accommodations can be obtained for banquets. There also is an adequate supply of lanterns available for scientific meetings.

The registrations will be handled by the Convention Bureau of the Chamber of Commerce, and will supply as many girls and typewriters as are needed. Information desk is included under this feature of the arrangements.

The local committee will work out details of entertainment. The golf tournament may be played at any one of a number of splendid courses at the various country clubs. Selection of a specific course will be made at a later date.

Selection of the chairman of the General Arrangements Committee and the appointment of committees will be completed in ample time for the convention. All of these committees can receive valuable assistance from the office of the Convention Bureau.

County Society Activities

1. The secretary reported that there are no county societies in Brown, Marshall and Starke counties.

2. *Merger of Fayette and Franklin County Societies.* Doctor Keeney, councilor of the Sixth District, read a letter from the Fayette and Franklin County Medical Societies asking that these two county societies be allowed to merge. Request granted by the Council upon the motion of Doctor Romberger, seconded by Doctor Alexander.

Annual Session of the American Medical Association at Philadelphia, June 8 to 12, 1931

Question as to whether or not Indiana physicians should attempt to get up a special train referred to the Executive Committee. Upon a motion by Doctor Shanklin, seconded by Doctor Rogers, the executive secretary was instructed to attend the Philadelphia session.

Reports of Standing Committees

Reports were made in the following order by the chairmen of the various standing committees of the State Association at the Council luncheon:

1. *Executive Committee,* Dr. William H. Kennedy in the absence of Dr. David Ross, chairman.

2. *Publicity Committee,* Thomas A. Hendricks in the absence of Dr. William N. Wishard, chairman. The Publicity Committee reported that questionnaires were being prepared and would be sent to hospitals in order to gain both historic and up-to-date data upon hospitals in this state.

3. *Scientific Work Committee,* Dr. H. H. Martin, chairman.

4. *Legislative Committee,* Thomas A. Hendricks in the absence of Dr. J. H. Hewitt, chairman.

5. *Civic and Industrial Relations Committee,* Dr. F. S. Crockett in the place of Dr. W. W. Washburn, chairman. Doctor Crockett reported that this committee was busy making an investigation into the problem of the payment of hospitals and physicians by injured persons who are victims of accidents on the public highways. These persons often seek emergency aid from physicians and hospitals and then leave without paying for these services. The questionnaire sent out by this committee to the hospitals shows that the loss in these cases ranges from three to ninety-one percent. The average loss is fifty-seven percent.

6. *Committee on Medical Education and Hospitals,* Dr. B. D. Myers, chairman. Doctor Myers reported that in September, 1929, 7,000 students were accepted in the medical schools of the United States and Canada and 6,000 were refused. In September, 1930, while exact figures are not available, it is believed the number of students refused was even greater. In answer to the question, he said that only four and one-half percent of the students accepted in the Indiana University School of Medicine came from out of the state. 435 out-of-state applicants were rejected in September, 1930. Out-of-state applicants must get a much higher scholarship requirement and must pay twice the fees required of applicants from Indiana. Tulane University School of Medicine in its new clinical building has made provision for a large Department of Oral Surgery, bringing back into medicine a field long surrendered to dentistry.

Doctor Myers said that the administration of the school is naturally greatly interested in sons of alumni, but that competition is so keen that no discretion is permitted the Entrance Committee and all students have to meet the published minimum quantitative and qualitative requirement.

7. *Committee on Credentials,* Dr. George D. Miller, chairman.

8. *Committee on Necrology,* Dr. G. G. Richardson, chairman, not present.

9. *Committee on Secretaries' Conference,* Dr. A. M. Mitchell, chairman. Doctor Mitchell suggested that secretaries of the component county medical societies of a district or group of districts, make it a matter of custom to have a meeting of the secretaries of the various county societies composing each district or group of districts. He suggested that the State Association allow $50 for such district meeting. No meeting, no allowance. Doctor Perry said he thought each district should be self-supporting and pointed out that his district, the Eleventh, had more than $1,100 in its treasury.

10. *Diphtheria Committee,* Dr. Thurman B. Rice, chairman. Doctor Rice reported that there were fewer deaths from diphtheria in Indiana last year than ever before in the history of the state. The number of diphtheria deaths last year in the state was 158. This year's figure should be even lower than last year. He spoke of the fact that more than thirty talks were given last year before various luncheon clubs, women's clubs, and parent-teacher associations in various parts of the state upon diphtheria immunization.

11. *Committee on Scientific Exhibit,* Dr. Ernest Rupel, chairman. Doctor Rupel expressed the belief that the exhibit should be better and larger each year. (The Council had already recommended the continuation of the scientific exhibit.) There were ten exhibits at the Fort Wayne session and one continuous moving picture exhibit. The moving picture exhibit did not work out so well. Eighteen exhibitors are expected for the 1931 session.

12. *Report of the State Board of Medical Registration and Examination,* Dr. F. S. Crockett, in the absence of Dr. William R. Davidson, secretary.

13. *State Board of Health,* Dr. William F. King, secretary. A bill for a permissive law under which full-time county, district, and larger city health departments can be established and maintained will be introduced at the next session of the Legislature. Doctor King spoke briefly of the White House Conference on Child Health and Protection, which he attended at Washington and which was attended by thirty-five delegates from Indiana, and said that an Indiana State Conference on Child Health and Protection would be held within a short time.

Doctor Padgett spoke of the fact that both Doctor Wishard and Doctor Ross, chairmen of the Publicity and the Executive Committees, respectively, were missed. He reported that Doctor Ross was in the hospital satisfactorily recovering from an injury resulting from a fall.

The Council sent greetings to both Doctor Wishard and Doctor Ross.

Report of Special Laboratory Committee

The following report was made by Dr. F. S. Cregor, chairman of the committee:

"Mr. President: Pursuant to a motion adopted by the House of Delegates at the Fort Wayne session, providing for the appointment of a committee to inquire into the laboratory situation within its jurisdiction, with a view of establishing a standard for laboratories in Indiana, of which the State Medical Association could approve, your committee has given no attention to the private laboratory maintained by a physician to serve his individual needs.

"Your committee finds that the American Medical Association has such a standard which provides, 'Essentials for the Approval of Laboratories.' It further finds that no state associations have adopted any standards for laboratories, but that medical societies in two large cities, namely, the New York Medical Society and the Chicago Medical Society, have adopted standards which are essentially the same as those adopted by the American Medical Association. It would further seem that there are many laboratories throughout the United States that have met the standard as adopted by the American Medical Association and that for the most part the several state medical journals require this approval to secure advertising space in the journals.

"Indiana seems to possess four such laboratories located in Indianapolis, Lafayette, Fort Wayne and South Bend. All of these seem to be provided with a medical director possessing a medical degree, one of which, at least, is a corporation, organized under the corporate laws of the state, potentially for profit. It would further seem that there are laboratories that solicit public patronage, and that are not provided with a director possessing a medical degree.

"Your committee is impressed with the importance of the delicate question of whether or not laboratory practice is in fact medical practice and, if so, with the importance of a corporation engaging in it, and, if not, the importance of requiring that it possess a medical director possessing a medical degree.

"Further, your committee observes no change in the laboratory situation in Indiana since the action by the House of Delegates at the Fort Wayne session. Therefore, it would recommend that any action on the part of the State Association be deferred until there are further developments.

"CREGOR,
"MERTZ,
"RICE."

Doctor Cregor moved the adoption of the report. Seconded by Doctor Hare; carried.

Liens for Practitioners in Accident Cases

Letters from Dr. George J. Geisler, of South Bend, president of the St. Joseph County Medical Society, and Dr. U. G. Souder, of Auburn, asking that some action of a remedial nature be taken to stop the abuse of persons injured in automobile accidents from avoiding the payment of bills for hospital and medical services, presented to the Council. Doctor Geisler in his letter called attention to the paragraph in the October, 1930, number of the *American Medical Association Bulletin*, which reads as follows:

"A bill was enacted in New Jersey providing for liens in favor of hospitals, physicians and nurses for the care of persons injured in accidents, on any judgment or settlement obtained by the injured person by reason of the accident."

The letter read in part:

"With this information, I know of three other states who have legislation enacted, making it obligatory on the insurance companies to pay all medical bills prior to settlement of claims to claimants by insurance companies in these states. I cannot recall the names of these states, but they can be obtained from the American Medical Association. I am sure that the St. Joseph County Medical Society intends to keep pounding away on the State Association to have some legislation enacted regarding this matter or make some attempt to secure legislation on this subject."

Doctor Souder in his letter spoke of the fact that he had spoken to the representative of his county asking for legislation that would remedy this abuse. Upon receiving Doctor Geisler's letter the secretary reported that he had written to the American Medical Association in regard to this matter and had received the following letter:

"Your letter of November 21 has been received, in reference to the statement in the October number of the Bulletin of the American Medical Association relating to 'liens for practitioners.'

"The statement in the Bulletin of the American Medical Association for October, 1930, that the legislature in New Jersey enacted a bill this year providing for liens in favor of hospitals, physicians and nurses for the care of persons injured in accidents, on any judgment or settlement obtained by the injured person by reason of the accident, was based on a report received from a national legislative reporting service. We have since been advised that the reporting service was in error. A bill was introduced providing for such liens but during its legislative course it was amended so as to provide for liens only in favor of hospitals. I am sorry that we do not have a copy of the law, as enacted, to send you. You can no doubt secure a copy of it from the official session laws.

"In 1927 the legislature of Nebraska did enact a law providing for liens in favor of physicians, in accident cases. This Bureau, at that time, had mimeographed copies made of this law, copies of which were sent to the several state medical associations. I inclose a copy of the law for your information.

"From some of the states to which copies of this law were sent, expressions of doubt have been received as to the expediency of seeking such legislation at the present time. The doubt seems to arise from the present state of the public mind with respect to the supposedly excessive charges for medical services. Fear is expressed that if the medical profession undertakes to promote legislation similar to that in force in Nebraska, it will be looked upon as a purely selfish move and as indicatnig the commercialization of the practice of medicine. I pass this idea on to you for whatever it may be worth."

Doctor Woodward enclosed in his letter a copy of the bill passed in Nebraska, which follows:

"LIENS OF PHYSICIANS, NURSES, AND HOSPITALS FOR SERVICES RENDERED IN THE TREATMENT OF INJURIES FOR WHICH THE PATIENT RECEIVES COMPENSATION

Laws of Nebraska, 1927. Chapter 162.

"An Act relating to liens; providing that physicians, nurses, and hospitals shall be entitled to liens for their services in certain cases; and to repeal sections 3234 and 3235, Compiled Statutes of Nebraska for 1922.

"Be It Enacted by the People of the State of Nebraska:

"Section 1. PHYSICIAN'S LIEN.—Whenever any person shall employ a physician, nurse or hospital to perform professional service or services of any nature, in the treatment of or in connection with an injury and such injured person shall claim damages from the party causing the injury, such physician, nurse or hospital, as the case may be, shall have a lien upon any sum awarded the injured person in judgment or obtained by settlement or compromise on the amount due for the reasonable value of services necessarily performed: Provided, that no such lien shall be valid against anyone coming under the Workmen's Compensation Act. In order to prosecute such lien, it shall be necessary for such physician, nurse or hospital to serve a written notice upon the person or corporation from whom damages are claimed that such physician, nurse or hospital claims a lien for such services, and stating therein the amount due and the nature of such services: Provided, however, that whenever an action is pending in court for the recovery of such damages, it shall be sufficient to file the notice of such lien in the pending action.

"Section 2. ACT REPEALED. That sections 3234 and 3235, Compiled Statutes of Nebraska for 1922 are hereby repealed.

Approved April 20, 1927.

"NOTE:—Sections 3234 and 3235 of the Compiled Statutes of Nebraska of 1922, repealed by the above act, were based on an act passed in 1915 (Acts of Nebraska, 1915, page 469). The act of 1915, however, related exclusively to physicians and was less specific as to the manner in which such liens might be enforced."

(Previous to the Council meeting the Executive Committee had discussed this matter and suggested that a conference might be held with representatives of the leading insurance companies of the state with a view to gaining cooperation of the insurance companies either in an attempt to enact some legislation of this sort or have an understanding with the insurance companies which would do away with the necessity of such legislation.) Upon motion by Doctor Rogers, seconded by Doctor Shanklin, the Council gave instructions that the Legislative Committee and the Civic and Industrial Relations Committee present a bill at the next Legislature to protect physicians and hospitals from this abuse.

Redistricting of State

Dr. William R. Davidson, past president, suggested that the following resolution be introduced at the meeting of the House of Delegates during the Fort Wayne session:

"Whereas, the Legislature of 1931 will be required to change the congressional districts of the state in accordance with the act of Congress of the United States,

"Be it resolved by the House of Delegates of this Association, That the councilor districts as at present constituted shall be unchanged."

Through an oversight this resolution was not presented and upon the instructions of the Executive Committee, to whose attention it was called, it was presented before the Council. A motion by Doctor Shanklin, seconded by Doctor Keeney, was passed that the districts of the state association remain as they are at the present time.

Resolution for Appointment of Special Committee to Change Constitution and By-laws

The following motion was presented by Doctor Shanklin, seconded by Doctor Romberger, and carried: "I move that a committee be appointed from the Council to make the necessary changes in the Constitution and By-laws providing for the annual election of a speaker and vice-speaker of the House of Delegates of the Indiana State Medical Association. Further, that this committee devise ways and means of simplifying the roll call of the House of Delegates." The chairman appointed Doctor Shanklin, Doctor Alexander, and Doctor Austin members of this special committee. Doctor Romberger made the motion, seconded by Doctor Hare, that this same committee be authorized to straighten out any conflicts that exist in the present By-laws as they now stand. Carried.

Life Membership Buttons

Doctor Hare suggested that life membership buttons be given to everyone over sixty-five years of age who had been a member of the state association continuously for twenty-five years or more. Doctor Hare said that similar action had been taken by the Indiana State Dental Association last year and he filed a copy of the action of the dental society with the secretary of the State Medical Association. He said that originally the action of the dental society carried with such honorary membership an exemption from paying annual dues to the Association. Doctor Bulson spoke against the exemption of payment of dues. He said that in some cases it would be a very delicate subject and might hurt the feelings of some physicians. Doctor Leach said that he thought such action should originate in local county medical societies and moved that the entire matter be left to the special committee on constitutional changes that had just been appointed by the chairman.

Resolution in Regard to Tuberculosis Association Clinics

Doctor Rogers presented the following letter to the Council:

"LAPORTE COUNTY TUBERCULOSIS ASSOCIATION
Member Indiana Tuberculosis Association

LaPorte, Indiana, June 11, 1930.

"Dr. .....,

Michigan City, Ind.

"Dear Doctor:

"The following is a report of ....., who was examined at the clinic by Doctor .....

"Chronic Asthma."

He said that this letter was from a local county tuberculosis nurse and it was his belief that anyone who presents himself to one of these tuberculosis clinics should be required to have a statement from a physician. Doctor Rogers presented the following resolution which was seconded by Doctor Shanklin and carried: "I move that the Council of the Indiana State Medical Association ask the Indiana Tuberculosis Association to require that each patient applying for examination in a tuberculosis clinic come with a request from a physician for such an examination."

Cooperation with Federal Commissioner of Narcotics

Dr. William C. Woodward, director of the Bureau of Legal Medicine and Legislation of the American Medical Association, sent a bulletin asking that the Indiana State Medical Association cooperate with the Federal Government in the enforcement of narcotic drug laws. One particularly important paragraph of the letter follows:

"Good-will alone, however, will not enable the states to cooperate effectively with the Federal Government. Effective state cooperation requires that the state have its own efficient agencies for enforcing its own narcotic laws, in its own courts, and for punishing offenses by fine, imprisonment, and, in appropriate cases, by revocation of licenses."

The Council referred this letter to the Legislative Committee.

Postgraduate Courses

Doctor Keeney spoke of the need of postgraduate courses in this state. Following Doctor Keeney's talk Doctor Doeppers invited the Indiana State Medical Association to enjoy the new clinical facilities of the City Hospital in case it should want to put on a postgraduate course. Doctor Keeney moved that the chair appoint a committee of three to investigate postgraduate work in other states, plan a course and make a report to the Executive Committee of the State Association in regard to a program of such instructional courses for Indiana. Doctor Padgett appointed Doctor Keeney, Doctor Rogers and Doctor Hare on this committee.

Elections for 1931

Upon the nomination of Doctor Keeney, seconded by Doctor Shanklin, Dr. David Ross and Dr. William H. Kennedy were re-elected unanimously members of the Executive Committee for 1931.

Upon the motion of Doctor Alexander, seconded by Doctor Hare, Dr. E. E. Padgett was re-elected chairman of the Council for 1931.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

TREASURER'S REPORT

Application of Funds for the Year Ended December 31, 1930

Income

Membership Dues, 2736 members (7—1929 memberships)	$19,152.00	
Income from Exhibits	3,020.00	
Interest on Certs. of Dept. and Chg. Acct.	86.55	
Interest on Liberty Bonds	212.50	
Interest on Realty Bonds	300.00	
Total income for period		$22,771.05

Expenditures

Executive Secretary's Office	$11,184.64	
Medical Defense	50.00	
Publicity Committee	470.48	
THE JOURNAL	5,474.00	
Public Policy	31.00	
Miscellaneous Committees	1,153.98	
Council	149.39	
Officers	159.00	
Annual Session	2,467.90	
Attorney	400.00	
Total expenditures		21,540.39
Net Income for the period Jan. 1 to Dec. 31, 1930		$ 1,230.66
Surplus at January 1, 1930		28,037.02
Surplus at December 31, 1930		$29,267.68

Analysis of Surplus Account at Dec. 31, 1930

Liberty Bonds held in safety deposit box (4¼%)	$ 5,000.00
Real Estate Bonds held in safety deposit box (6%)	5,000.00
State Highway Aid Bonds held in safety deposit box (5%)	2,000.00
City Hospital Bonds held in safety deposit box (1 at 4¾%, 5 at 4%)	6,000.00
Flood Prevention Bonds held in safety deposit box (4¼%)	5,000.00
School Improvement Bonds held in safety deposit box (4½)	5,000.00
Checking Acct. balance at Indiana National Bank	1,067.68
Petty Cash Acct. balance in Bankers Trust Co.	200.00
	$29,267.68

WM. A. DOEPPERS,
Treasurer.

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

November 18, 1930.

Meeting called to order at 3 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., A. B. Graham, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held November 11 read and approved.

The release, "Thanksgiving Greetings," read and approved for publication Wednesday, November 26.

Radio release, November 22, "Thanksgiving Greetings."

Requests for speakers:

November 18—Knox County Medical Society, Vincennes, Ind. Speaker assigned.

November 20—Exchange Club, Muncie, Ind. Speaker assigned.

December 4—Dearborn-Ohio County Medical Society, Lawrenceburg, Ind. Speaker to be assigned.

December 9—Hanover Civic League, Hanover, Ind. Speaker assigned.

Report on medical meeting:

November 12—Kiwanis Club, Muncie, Ind. "Possibilities of Plastic Surgery (Riley Hospital)."

In accordance with instructions the secretary presented the letter referred to in the minutes of the Bureau of November 11 to an ophthalmologist asking if there is any class of eye cases which might be referred to an optician or an optometrist and by such action make it possible for a grave condition of the eye to be overlooked. The ophthalmologist said that an optician or an optometrist might overlook certain inflammations of the anterior or posterior segments of the eyeball which would result in a grave condition of the eye. The inquiry received by the Bureau in regard to this question was answered as follows:

"Your letter of November 5 has been given careful attention by the Bureau of Publicity.

"The Bureau has instructed me to write you that many complicated conditions of the eye may not be apparent upon ordinary examination and the Bureau suggests that the class of cases indicated in your letter should be referred to an oculist through the family physician. The family physician usually knows the hereditary and individual tendencies of his clientele and should be glad to send such patients who need the attention of an oculist directly to a competent specialist in this line of work."

Letter received from the editor of *The Steuben Republican* in reply to a note from the Bureau regarding medical publicity articles.

Copy of letter from secretary of St. Joseph County Medical Society received in regard to a physician of South Bend whose ethics are reported to be questionable and who is advertising himself as assisting the Wickersham commission appointed by President Hoover to study the causes of crime in the United States. An attempt was to be made to find out whether or not this physician really was a member of the Wickersham commission.

The following questionnaire has been formulated to go to the hospitals of the state:

QUESTIONNAIRE TO HOSPITALS

1. Official name_____
2. Date of founding_____
3. Number of beds_____
4. Average number of patients cared for daily_____
5. Total number cared for in year just passed_____
6. Has your hospital an organized staff?_____
7. To what extent does your staff organization control the professional work of your institution?_____
8. Can patients be treated only by staff members or by any physician who may not be a staff member but sends in his patient?_____
9. Has your hospital an organized training school for nurses?_____
10. If so, how many nurses were graduated from your hospital last year?_____
11. What entrance qualifications for nurses are required?_____
12. How many years do nurses serve before graduation?_____
13. How many trained nurses are on duty at your hospital?_____
14. How many student nurses are on duty at your hospital?_____
15. What class of cases does your institution receive?_____
16. Are you limited to any special class of cases?_____
17. What class of cases do you exclude?_____
18. Has your hospital an endowment or is it supported by income from patients? Or by both endowment and income from patients?_____
19. Have you a pathological or x-ray laboratory with an all-time laboratory technician?_____

(A copy of this questionnaire is being sent to all hospitals listed on pages 943-44 of the American Medical

Association Hospital Registry for 1930. This questionnaire is to enable the Bureau of Publicity of the Indiana State Medical Association to trace the development of hospital service in Indiana.)

Please return to Thomas A. Hendricks, Executive Secretary, Indiana State Medical Association, 804 Hume Mansur Building, Indianapolis, Indiana.

The following letter is to accompany this questionnaire to the superintendents of the hospitals:

"The Bureau of Publicity of the Indiana State Medical Association is compiling data in reference to the hospitals of the state. The Bureau desires to give your institution full opportunity to present any data indicated in the enclosed questionnaire, or any additional data that you think might be helpful. We are asking you therefore kindly to fill out this questionnaire and return it to the Bureau of Publicity."

The following bill was approved for payment:

Elmer T. Lefferson $2.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 25, 1930.

November 25, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held November 18th read and approved.

The release, "A Word to Hunters," read and approved for publication December 6th.

Radio hour turned over to Marion County Tuberculosis Association for November 29th, December 6th, December 13th and December 20th.

Request for speaker:

December 4th—Dearborn-Ohio County Medical Society, Lawrenceburg, Indiana. "What Fathers and Mothers Should Know About Raising Children." Speaker assigned.

Report of Madison County "reminiscent" meeting received. This was an unusual meeting held in honor of the older physicians of the county. The announcement of the meeting by the secretary of the society read in part as follows:

"Three generations of Jones, Hunts, Hocketts, and Chittendens have practiced in Anderson. Two generations of Armingtons, Kings, Wilsons, Mileys, Tracys, Hoppenraths, and Newcomers, Ploughes and Culliphers are hoping that they also may be succeeded by sons in the profession. Let us take a few hours' time at this unusual meeting to renew old acquaintances, forget old differences, and drink a toast to those who have passed beyond. Some of us are possibly getting to that place in life where we are being crowded out by some of the younger fellows who have yet to learn that medicine is an art more than a science, and for all that we have seemed to gain in our laboratories the test of time shows the final result to be the same—the Reaper with his scythe takes us all.

"Madison County Medical Society records date back to 1884, but in the minutes of some later meetings Dr. George Chittenden stated he had been a member since 1875. Dr. W. M. Garretson, of Perkinsville, Dr. L. E. Alexander and Dr. O. W. Brownback are the only members now living who were members in 1890. The first *doctor* in the county that I can find in any record was Dan Perry, a school teacher who took up medicine and practiced near Frankton in 1836."

At the meeting Dr. T. M. Jones produced records of the Madison County Medical Society dating from November 1, 1862, to April 30, 1883. "These records, yellowed with age and brittle to the touch, penned in the flourishing hand of the sixties," give a complete record of the society for a twenty-one year period and are invaluable from an historic standpoint to the Madison County Medical Society.

Editorial appearing in an Indianapolis newspaper decrying the failure to enact the Sheppard-Towner act brought to the attention of the Bureau. The secretray was instructed to gather facts in regard to just what was accomplished by the Sheppard-Towner act.

Letter received from secretary of Delaware-Blackford County Medical Society referred to American Medical Association.

Letter received from Louis Ludlow, congressman of the Seventh District, in answer to a communication in regard to the Wickersham crime commission.

Letter received from director of public relations of the Committee on the Costs of Medical Care enclosing publicity. The secretary was instructed to file this material for future reference.

A member of the Bureau was instructed to annotate all points favorable to vivisection.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 9, 1930.

December 9, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., by proxy, and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held November 25th read and approved.

The release, "The Best Christmas Gift," read and approved for publication December 20th.

Radio hour turned over to Marion County Tuberculosis Association for December 13th and December 20th.

Reports on medical meetings:

November 15—Kiwanis Club, Connersville, Indiana: "New Ideas in the Treatment of Tuberculosis."

November 18—Knox County Medical Society, Vincennes, Indiana: "Plastic Surgery Following Severe Burns."

November 20—Exchange Club, Muncie, Indiana: "Is Ours a Dying Race?"

Meeting held December 9—Knox County Medical Society, Vincennes, Indiana: "Backache."

Report of Child Welfare Conference at Washington brought to the attention of the Bureau. Editorial in the *American Medical Association Journal* of December 6th, page 1746, and report on page 1765.

The secretary was instructed to summarize the views of the medical profession in regard to Sheppard-Towner legislation. This summary was to be prepared for the next meeting of the Bureau.

Letter received from the secretary of the American Medical Association concerning a suggestion that had been presented to the Bureau that a certificate or sign denoting membership be provided for display in the offices of members of the Indiana State Medical Association. A part of the secretary's letter concerning the above suggestion follows:

"My opinion is that the scheme will not work to good advantage. I think you will find that, if the members of your state association resort to the use of such cards, they will simply stimulate the men who are not members to devise fancier and larger cards to use in their offices and that the fancier and larger the card the more the public will be impressed. The American Medical Association at one time sent out Fellowship certificates to all Fellows, and many men framed these certificates and hung them in their offices. I recall very definitely an experience that I had in a certain county where these Fellowship certificates were displayed in the offices of a number of members of the state medical association and where in the offices of men who were not members handsomely engraved certificates certifying to their membership in all sorts of societies decorated the walls in great profusion. The principle involved is very much the same as that involved in advertising. A reputable physician who tries to advertise will find himself entirely unable to compete with the man who does not feel himself bound by the restrictions imposed by the Principles of Medical

Ethics, and if a reputable physician resorts to advertising he will surely stimulate the unethical man to redouble his efforts in that particular field."

The executive secretary of the Association was instructed to write to the physician making the suggestion, sending him a copy of the letter from the secretary of the American Medical Association.

The secretary was instructed to prepare a letter and send it to the papers of South Bend containing the answer from Mr. Wickersham in regard to the physician of South Bend who is advertising himself in the South Bend papers as assisting the Wickersham Crime Commission.

Letter received from a nurse in Carroll county asking that additional releases be sent for distribution in Carroll county brought to the attention of the Bureau. The Bureau authorized the secretary to supply these additional releases as requested.

A member of the Bureau who was instructed to annotate all points favorable to vivisection was not present at the meeting so his report was held over for the next meeting of the Bureau.

The secretary was instructed to address a letter to the Lincoln Chiropractic College of Indianapolis asking for a catalog of that institution. It has been rumored that the Lincoln Chiropractic College is going to present a bill at the next session of the legislature which would authorize its graduates to take State Board of Medical Registration examinations although this institution is not considered class A by the State Board. It is not thought that the required course in the Lincoln Chiropractic College is sufficient to meet these standards.

Report of the Bureau of Publicity was made to the Council at the regular midwinter meeting December 3rd.

The following bills were approved for payment:

A. B. Dick Company	$ 3,85
Central Press Clipping Service	5.00
J. S. McBride, M.D.	6.00
	$14.85

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 16, 1930.

December 16, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held November 9th read and approved.

The release, "Danger—Hair Removal by X-ray Machines," read and approved for publication December 27th.

Radio hour December 20th turned over to Marion County Tuberculosis Association.

Reports on medical meetings:

December 4—Dearborn-Ohio County Medical Society, Lawrenceburg, Indiana.: "Hygiene of Infancy."

December 9—Knox County Medical Society, Vincennes, Indiana: "Backache."

The secretary reported that the governor was to issue invitations for an Indiana Conference on Child Health and Protection to be held in Indianapolis January 15th to 17th. This conference is to be formulated along the lines of the White House Conference on Child Health and Protection recently held at Washington. The secretary reported that proceeding along the lines of the Washington conference one part of the program is to be devoted to medical service. The Program Committee of the conference has been asked to submit this part of the program to the Bureau of Publicity for suggestions.

Letter received from one of the South Bend papers in answer to a letter from the Bureau of Publicity in regard to a doctor in South Bend who, it has been announced in the South Bend papers, is assisting the Wickersham Crime Commission. The secretary was instructed to get the "story" upon this doctor which appeared in this particular South Bend paper.

The following letter was received from the National Bureau of Economic Research, Inc., which the Bureau instructed the secretary to forward to the heads of one of the industrial clinics in Indiana asking them for any information they may have upon this subject:

"At the request of the Committee on the Costs of Medical Care, Washington, D. C., the National Bureau of Economic Research is gathering some information regarding organized plans for providing medical care on an insurance or contract basis. Of course we have access to a great amount of published data regarding health and accident insurance as written by commercial and fraternal organizations, but we are not primarily concerned with insurance plans which pay a cash indemnity during the period of disablement from sickness, but rather with schemes under which, in return for the payment of a fixed fee, the contract holder becomes entitled to medical service as such. As you of course know, there are, in various sections of the country, corporations organized for the purpose of rendering such contract medical service. Sometimes the service is limited to that which a general medical practitioner can furnish in his own office; sometimes, however, the contract includes hospital service. Where such corporations exist, they usually enter into arrangements with physicians to furnish contract holders a certain type of medical service. The doctor receives his remuneration from the medical service corporation on a fixed schedule basis. Where the corporation provides hospital service it usually has a fixed schedule of ward rates in local hospitals.

"We have heard of one or two group clinics and general hospitals which are offering a contract medical service.

"At the recent meeting of the Committee on the Costs of Medical Care in Washington, I discussed this phase of our study with Dr. Olin West, secretary and general manager of the American Medical Association. Doctor West suggested I write the secretaries of the different state medical associations for information.

"We do not wish to burden you in this matter, but if you could give us some information as to contract medical service in your state, it would be a real contribution to our study. The questions to which we should like to have specific answers are the following:

"1. Do you know of any hospitals or group clinics in your state that are offering medical service to individuals or to employers (for the benefit of their employees) on a contract basis? The essence of the contract is of course an agreement on the part of the hospital or clinic to furnish a certain type of service during a stipulated period of time in return for a fixed fee paid by the contract holder.

"2. Do you know of any corporations or associations offering such service and arranging with medical practitioners and hospitals to give the medical service?

"If you do know of any such clinics or corporations, and could let us have the names and addresses so that we could write direct for further information, we should greatly appreciate it."

A catalog of the Lincoln Chiropractic College of Indianapolis was brought to the attention of the Bureau. The following letter was received from the secretary of the Indiana State Board of Medical Registration and Examination in regard to the standing of the Lincoln Chiropractic College:

"In reply to your inquiry regarding The Lincoln Chiropractic College, I would state that there has never been any inspection of it with view of classification for purpose of determining the eligibility of graduates for licensure."

Letter referred to the Bureau asking for material upon the subject of state medicine. Letter answered.

Report of the Indiana Tuberculosis Commission calling for new legislation brought to the attention of the Bureau. This Commission was appointed by the governor to survey the situation in Indiana and provides a program for the construction of sanatoria in Indiana. The secretary was instructed to send a copy of this report to the editor of THE JOURNAL and also a member of the Bureau was

asked to review this report for the next meeting of the Bureau.

The secretary presented a review of Sheppard-Towner legislation. This review was to be further summarized and presented to the committee at its next meeting. When finally completed this was to be sent to THE JOURNAL and also used as a basis for a release.

A report on "Vivisection" was to be made at the next meeting of the Bureau of Publicity. It was suggested that an outline of the work of Pasteur and vivisection be presented and also a copy of an article upon "Vivisection" was to be obtained from the librarian of the medical department of the University of Buffalo.

A questionnaire was to be prepared and sent to the secretary of each state medical association asking for information in regard to full-time health officers:

1. Does your state have any counties or cities where a full-time health officer is employed?
2. If so, is the plan of a full-time health officer satisfactory?
3. Are these full-time health officers allowed to engage in private practice?
4. Are these full-time health officers always physicians?
5. What is the average salary of a full-time health officer?
6. Is the full-time health officer plan approved by your state medical association?
7. Are such officers appointed in all counties of your state or a part of the counties?
8. How many counties are there in your state?
9. How many counties have full-time health officers?

The following bill was approved for payment:

The Bailey Office Supply $15.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 23, 1930.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, DECEMBER, 1930

Health officers in ninety counties of the state sent in either positive or negative disease reports. Two counties, namely, Newton and Pike, did not report. Every county should report. If they do not have diseases they should send a card, stating that fact. Just sign the card and send it in blank if you have no diseases in your jurisdiction. 419 negative cards were sent in this month.

The current prevalence of diseases from the urban and rural population are shown below:

Diseases	*Total Reported*	*Urban*	*Rural*
Tuberculosis	197	125	72
Chickenpox	578	381	197
Measles	543	323	220
Scarlet fever	776	396	380
Smallpox	242	131	111
Typhoid fever	24	16	8
Whooping cough	70	61	9
Diphtheria	203	118	85
Influenza	26	2	24
Pneumonia	25	5	20
Mumps	46	28	18
Poliomyelitis	2	2	0
C. S. meningitis	20	11	9
Tularemia	5	2	3
Septic sore throat	2	0	2

The incident of prevalence shows a decline over the previous month, except measles, smallpox, pneumonia and cerebro-spinal meningitis.

Measles. This is not measles time, but a marked increase is shown. 350 cases the previous month. The disease was epidemic during the month in Tippecanoe county. Lafayette reports 232 cases. Twenty-seven other counties reported cases. The corresponding month the previous fiscal year only 92 cases were reported.

Smallpox. This disease is not far off the normal trend. 233 cases the previous month. 209 cases the same month last year. The estimated expectancy for the last five years for December is 222 cases.

Pneumonia. As far as the reporting of this disease is concerned, it is hardly worthy of mention, because so few cases are reported. The normal average over a seven-year period is only 60 cases. Pneumonia is a transmissible disease and is reportable. There are only two diseases, namely heart disease and cancer, in which the mortality is greater.

Meningococcus Meningitis. The disease shows an increase over the preceding month. The normal trend is for a decline. 13 cases reported last month. The corresponding month the previous year 56 cases. December of 1929 was the beginning of the epidemic of the disease which extended well up into the current fiscal year, when 476 cases were reported.

Scarlet Fever. The disease shows a slight decline. This is perhaps only temporary. The peak will not be reached until February or March of the coming year. 829 cases reported last month.

Typhoid Fever. A continued decline is normal for this disease at the season of the year. The drought that has been severe in the southern part of the state and still prevails is not a prominent factor in the prevalence of the disease. The distribution of cases has been practically equally divided between the north and the south part of the state. 54 cases were reported last month.

Diphtheria. The present report shows a decline. 250 cases the previous month. 199 cases the same month the preceding year. The estimated expectancy was 300. The estimate is based on the experience of the last seven years, including the epidemic of 1923 when 794 cases were reported.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

INDIANAPOLIS MEDICAL SOCIETY

December 6, 1930.

The program for the regular meeting of the Indianapolis Medical Society which was held at the Athenæum Tuesday, November 4, 1930, at 8:15 p. m. was as follows:

Case Reports:

1. Xanthomatosis or Christian's Syndrome in a Child of Four Years ..... Howard Mettel, M.D.
2. Epidemiology of Epidemic Encephalitis ..... H. W. McKane, M.D.
3. Vincent's Infection of Antrum Following Radical Operation ..... C. H. McCaskey, M.D.
4. The Use of Kieland Forceps ..... A. J. Micheli, M.D.
5. Acute Sinusitis with Fatal Sequelæ ..... J. J. Littell, M.D.
6. Coxa Plana ..... Robert A. Milliken, M.D.
7. Traumatic Injury of the Kidney in Children ..... H. O. Mertz, M.D.

The program for the regular meeting of the Indianapolis Medical Society which was held at the Athenæum Tuesday, November 11, 1930, was as follows:

1. Acute Appendicitis ..... Cleon A. Nafe, M.D.
2. Mastoiditis with Lateral Sinus Thrombosis Without Otorrhea in a Two-month-old Infant ..... Louis Segar, M.D.

Dr. Segar's paper was read by Dr. Walter Stoeffler.

Discussion: J. M. Cunningham, M.D., and H. M. Banks, M.D.

The following physicians were elected to membership: Lyman Meiks, Francis Prenatt, F. M. Applegate, Myron S. Harding, Dohothy D. Teal, Robert F. Dearmin, James F. Balch and Paul C. Furgason.

On November 18, 1930, the Indianapolis Medical Society was the guest of Dr. Max Bahr, superintendent of the Central State Hospital. The hospital medical staff presented a symposium on five years' experience with the

malaria treatment of neurosyphilis. The program was as follows:

1. The So-called Recovery of Paresis. Presentation of Cases ..... Max Bahr, M.D.
2. The Clinical Outcome of the First Hundred Paretics Treated from 1925 to 1927 ..... Francis Prenatt, M.D.
3. The Seriological Outcome of the First Hundred Paretics Treated from 1925 to 1927 ..... A. M. DeArmond, M.D.
4. The Paretic Eye Following the Malaria Treatment ..... C. P. Clark, M.D.
5. The Mechanism of the Malaria Treatment. Lantern Slides ..... W. L. Bruetsch, M.D.

The Indianapolis Medical Society held a dinner meeting at the Athenæum on Tuesday, November 25, at 6:30 p. m. The guest speaker was Dr. U. V. Portman, of the Cleveland Clinic, Cleveland, Ohio. Doctor Portman's subject was "The Role of Radiation Therapy in the Treatment of Benign Gynecological Conditions."

At the annual election on December 2 the following officers were elected for the year 1931:

President—Dr. E. D. Clark.
First Vice-president—Dr. E. O. Asher.
Second Vice-president—Dr. H. F. Nolting.
Secretary-Treasurer—Dr. Chester A. Stayton.
Council—Dr. Ralph Lochry, Dr. Elmer Funkhouser.
Delegates—Dr. Henry S. Leonard, Dr. Max Bahr, Dr. Harry K. Langdon.
Alternate Delegates—Dr. H. H. Wheeler, Dr. L. G. Zerfas, Dr. Paul Hurt.
Library Committee—Dr. George Bond (one year), Dr. Wm. N. Wishard, Jr. (two years), Dr. E. Vernon Hahn (three years).

The scientific program following the election was as follows:

Case Reports:

1. An Unusual Reaction During a Kimpton-Brown Transfusion ..... W. P. Moenning, M.D.
2. Chronic Ulcerative Colitis ..... H. H. Wheeler, M.D.
3. Pancreatic Tumor ..... J. B. Young, M.D.
4. Retro-Pharyngeal Abscess with Edema of the Glottis ..... J. Wm. Wright, M.D.
5. Case No. 1—Malaria Complicating Pregnancy; Case No. 2—Malaria Complicating Labor ..... Harry J. Weil, M.D.
6. Generalized Urinary Infection Due to Retention of Urine Caused by Hypertrophy of the Prostate, Complicated by Diverticulum of the Bladder, Occluded Left Ureter and Left Nephrolithiasis ..... Wm. N. Wishard, Jr., M.D.
7. Some Results Observed in a Case of Secondary Anemia ..... J. H. Warvel, M.D.

CHESTER A. STAYTON, M.D.,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met in the Public Library at South Bend, November 25, 1930, with Dr. Martha Lyon, assistant secretary and treasurer, in the chair in the absence of both president and vice-president. Dr. C. R. Graham, of Bourbon, was elected to membership. The paper of the evening was "Some Personal Aspects of Medical Practice," by Dr. D. W. Frash. The paper was discussed by Drs. M. W. Lyon, Jr., Sullivan, Fisher, Boling, Mitchell and Haley.

The annual business meeting of the St. Joseph County Medical Society was held Tuesday, December 2, 1930, in the Public Library. The following officers for 1931 were elected: President, Dr. Marcus W. Lyon, Jr.; vice-president, Dr. J. V. Cassady; secretary and treasurer, Dr. R. B. Dugdale; assistant secretary and treasurer, Dr. Martha Lyon. New members of board of censors, Dr. A. S. Giordano; delegate, Dr. George Geisler; alternate, Dr. K. T. Knode.

The St. Joseph County Medical Society held its last regular meeting for the year December 16, 1930, with President Dr. Geisler in the chair. The paper of the evening was given by Dr. Charles Bosenbury on "Bringing Up Pa and Ma and the Baby" (a pediatrician takes a peep at child psychology). An abstract of Doctor Bosenbury's paper is as follows:

"While the influence of heredity is important, still we must recognize that environment and training are vital in the development of an individual. No one has a finer opportunity to start parents right in developing good habits and emotional control in their children than the family physician. Modern psychology has many suggestions of value to offer and it is the physician's duty to acquaint himself with the best that is taught, in order that he may more fully serve his patrons.

"Experience is not necessarily the best teacher, for it may mean making the same mistake many times. Happiness and success depend largely upon the things to which one is accustomed. A child will be just as happy and contented under a scientific regimen as under sentimental treatment.

"The baby begins to learn from birth and the attitude of the parents toward their child is of utmost importance. While they must exercise control, it must be in the nature of guidance and teaching rather than domination. They must endeavor to understand the child from the standpoint of a child and not judge him by the standards of an adult. Disobedience should be met with punishment, which should be carefully dosed out like strong medicine.

"The new-born baby is helpless. He has certain 'life preserver' instincts which make life possible, but he has to learn to adjust himself to his environment and to depend upon someone to teach him how to live. In the beginning very few stimuli have any power to set off an emotional reaction in an infant. Psychologists have shown how a baby develops emotionally, how he comes to fear certain things, why he becomes angry and how he develops affection. They have indicated how the mental and emotional life may be so directed that he will acquire those traits and habits which are socially desirable in adults.

"The training of a child must begin early. There must be routine, and the child taught that certain things are expected and are normal. It is far more helpful to praise a child when he does right than blame him when he does wrong. To learn he must be happy when he succeeds. It is always better to substitute some desirable activity for one that is undesirable. A child must be trained to eat, to sleep, to attend to matters of cleanliness and elimination and to get along with his fellows. If this training is begun in infancy there will be less need for correcting poor and faulty habits later on.

"Little children when of an age they may understand should be frankly given some knowledge concerning reproduction, preferably by the mother. There is a tendency among some psychologists almost to approach obscenity in their teaching, but any child may be given sufficient knowledge of the subject without the back-to-nature stuff advocated by these ultra modern psychologists. In America we have been more prudish than is the custom in Europe. Statistics show that in Europe the illegitimacy rates are generally much higher than in America. Between foolish prudery and license and obscenity there is a safe place, and it is this place parents should assist their children in finding.

"As President Hoover at the recent Child Conference stated concerning children, we must seek 'to guide their recreations into wholesome channels, to steer them past the reefs of temptation, to develop their characters, and to bring them to adult age in tune with life, strong in moral fiber, and prepared to play more happily their part in the productive tasks of human society.' To this ideal physicians dealing with children must devote their best efforts."

The paper was discussed by Doctors Owen, Lyon, Eastman, Sullivan, Giordano and Knode. It is to be hoped that the entire paper may be printed later.

MARTHA BREWER LYON, M.D.,
Assistant Secretary.

FORT WAYNE MEDICAL SOCIETY

The Fort Wayne Medical Society held its regular meeting November 11, 1930, at 8:15 p. m. at the Wayne Pharmacal Building. The minutes of the two previous meetings were read and approved.

Dr. J. C. Wallace presented a clinical case of a woman, aged thirty-two, who was an eight-para. In September, 1927, she had had a Cæsarean section for a placenta prævia, occurring in her seventh pregnancy. The onset of labor and the progress of the confinement of the eighth pregnancy was uneventful at the outset. To hasten progress and prevent prolonged contractions on the scarred uterus, the operator applied forceps after dilatation had been completed. During the fairly early stages of the labor the patient complained of a very sharp tearing-like sensation low down in the abdomen. On manual extraction of the placenta the operator discovered a rent in the uterine wall. The patient was sent to the hospital and a hysterectomy failed to save her life. In discussion of the paper Dr. E. D. Smith indicated that it was his opinion that the uterus had ruptured early, that the extremity of the baby had plugged the rent, and that on extraction of the babe, the uterus began to bleed, wherewithall the patient began to show some signs of internal hemorrhage. Further discussion was entered into by Doctors Cartwright, Bruggeman and Rothschild.

The next paper of the evening was presented by Dr. Noah Zehr on the subject of electro-cryptectomy of tonsils. In prefacing his remarks Doctor Zehr as a general practitioner called attention to the fact that if the general practitioner were to continue his operations on tonsils there was room for improvement of technique, diagnosis, etc.

I. Factors in guiding the treatment of adult tonsil tissue:

Laity is interested.

Manufacturers are pushing the sale of equipment.

The electric method has merit.

Physicians also aggressive for a change.

II. Comparison of the older methods of guillotine to the modern enucleation technique. The hazards of poorly done enucleations and postoperative results were discussed. Accidents in tonsillectomy are sufficiently frequent to class it as a major operation.

III. The electrical method of removal needs the name "electro-cryptectomy," as that is actually what is done—the crypts are obliterated, and the crypts are the harbors of the infecting agents. Lymphoid tissue in the throat is harmless unless it is obstructive or contains infections.

IV. Care should be taken in condemning tonsil tissue in adults. The tonsillar tissue may show an inflammatory reaction to a disturbance elsewhere in the body.

V. The difference between electro-surgery of the tonsils and the enucleation is that one is a minor and the other a major operation. This note is important to the general practitioner who is treating tonsils.

VI. Technique: Topical local anesthetic, one side only—then there will be no aspiration.

At one sitting make only two, three or four electrical contacts of from one-half to two seconds' duration with a 250 to 300 milliamps through the patient. The discrepancies of current through the patient must be guided carefully.

At intervals treat all the crypts.

VII. Results: Pathological lymphoid tissue is eliminated, the remnants are of normal tissue. This is covered by an epithelium.

The patient is saved a hospital bill and experiences no loss of time from his work.

The hazards are eliminated.

The discussion of the subject was further considered by Dr. N. H. Prentiss, who presented "Five Don'ts" in the procedure, the contents of which are listed:

1. A knife can only cut, but medical electricity can do a lot of other damage. Hence do not attempt the method without a thorough knowledge of medical electricity.

II. The proper intensity of the current is important from the standpoint of sterilization of the part, bleeding points, proper dessication, and coagulation.

III. Do not do too much at one sitting.

IV. Be meticulous in the protection of the pillars.

V. Be respectful of the modality at all times and pay close attention to all details of connections, etc.

Discussions were made by Doctors Bulson, Drayer, Cartwright, Hoffman and Dancer. The pertinent point brought up in the discussion was the question of proof of the totality of the destruction of the infection foci. Pathological and bacteriological studies would answer this question. The other question not completely answered was why a notorious advertising surgeon had discarded the procedure.

Dr. J. M. Pulliam reported that the delegates to the state meeting had little to bring back to the society. The matter of a full-time health officer was opposed in meeting. Likewise, the matter of eight tuberculosis sanitoria in various parts of the state.

L. P. Harshman, chairman of the Finance Committee for the state session, reported that to his knowledge all bills were in and paid. A detailed report of the expenditures was given which showed that the contributions from every source amounted to $3,812.25, disbursements $3,463.25, balance on hand $349.

Doctor Bruggeman moved that, after all bills are paid, the balance if any be placed to the Sick Benefit Fund of the Society. After considerable discussion the motion was carried, nineteen for and thirteen against.

Forty-nine members and four guests were present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Shrine Club Rooms, November 18, 1930, at 5:00 p. m.

Dr. Geza de Takats, from the department of surgery at Northwestern University, first presented a demonstration clinic on the method of treating varicose veins by the injection method. Three cases were presented. The first case was not treated, due to the fact that there was evidence to prove more or less recent infective phlebitis. It was suggested that this patient wait several months before any treatment be done. The other two patients were injected with the sodium chloride-dextrose-benzyl alcohol solutions. Fifty physicians attended the clinic.

Following the demonstration there was a dinner at which forty-nine members and sixteen out-of-town guests were present. After the dinner a discussion, chiefly pointed to the causes of failures in the injection method, was presented by Doctor de Takats, lantern slide demonstrations being given.

At the outset the speaker said that a few years ago it was necessary to argue for the injection form of treatment in any case. Today it is necessary to argue against its use in many cases. This is due to the popularity by virtue of cost, ease and apparent efficiency of the method.

Special attention was called to arterio-sclerotic patients, cases where there is an anastamosis between vein and artery, Boerger's disease, joint disorders wherein the pain has been ascribed to veins which were present. All of which discussion called for special attention to the discrepancies existing between the patient's complaints and the physical findings. In other words, a complete examination and history is important before injection treatments are decided upon.

General contraindications are hyperthyroidism, suspected tuberculosis, angina, and acute infections. Local contraindications are obstruction of the deep veins, possible latent infections in the vein wall, and some of the extremely large wide open veins (these need a ligation preceding the injection).

Errors in technic are too coarse needles, too long bevel on needles, vein not properly stripped, and lack of proper pressure for forty-eight hours after the treatment.

The choice of solutions is not so important except that fifty-percent dextrose is strong enough for the fine veins seen in young girls, but stronger solutions are needed for the larger veins. Fifty-percent dextrose, thirty percent

sodium chloride, with benzyl alcohol, seems to be the solution of choice for the larger veins. The alcohol tends to lessen the cramps. Novocain intravenously for this work is dangerous. Quinine and urethane have the advantage of needing only a small amount for the injection. Sensibility to the quinine must be considered.

Emphasis of the after care was pointed to the inadvisability of immobilizing the patient following injection. This is important in the matter of preventing a dangerous ascending thrombosis. The patient should be seen every three months after the treatment is concluded in that other treatment may be necessary.

Prevention of necrosis was emphasized from the following standpoints:

Be positive that the short beveled needle is in the vein.

Discontinue if a hematoma is presented.

Stop if pain or burning sensation is complained of.

If infiltration has taken place, use no pressure; use dry heat, and thirty-percent blue ointment.

Discussion was given by Doctors Schulze, Bruggeman, Klinger, Hall, Wright and Johnston.

Forty-nine members, sixteen guests, present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting November 25, 1930, at 8:30 p. m. at the St. Joseph Hospital. Minutes of the two previous meetings were read and approved.

The program of the evening was presented by the staff members in the form of clinical case reports and presentations.

I. Dr. J. H. Gilpin presented a middle-aged male with "pemphigus foliatia" of one year's duration. Prognosis considered bad. Discussed by Doctor Johnston.

II. Dr. C. J. Rothschild presented a case of a female thirty-two years of age showing some pituitary and thyroid disturbance, especially in the hands and feet. There was a marked scarcity of hair. The patient has had three Cesarean sections due to a contracted pelvis. At this time she has a crater-like ulcer in the joint and a positive Wassermann. She is now receiving iodide treatments. Paper discussed by Doctors Bruggeman, VanBuskirk, Harshman and Johnston.

III. Dr. H. A. Ray presented a case of a male sixty-seven years of age who had been sick with pain in the abdomen and vomiting for some three days prior to consulting the physician. General examination and x-ray showed evidences of an obstruction which was not considered in the large bowel. Operation showed a large carcinoma of the ileum and gangrene of some three and one-half feet of the small bowel. Paper discussed by Doctors Wright and Weaver.

IV. Dr. H. O. Bruggeman presented three cases:

1. Female fifty years of age who for the past year has been having numerous and recurrent deep abscesses about the scalp and temporal areas. In the spring of 1928 one son had typhoid and in the spring of 1929 a second son had typhoid. The laboratory findings show negative Widal in the patient and the cultures characteristic of the pus from the abscess indicate typhoid. By deduction the essayist thinks this must be a para typhoid infection of the scalp.
2. Male fifty-four years of age had pain in the abdomen several days prior to vomiting and when first seen by the physician there was a mass in the right side of the abdomen which felt much like the small kidney. General and x-ray examination indicated intestinal obstruction in the region of the cecum. At operation one and one-half feet of the ileum was invaginated in the cavity of the cecum. This intussusception was gangrenous and necessitated the removal of the cecum as well as a portion of the ileum. The patient at this time is doing nicely.
3. Case of a new born babe, breech delivery, with convulsions and the signs of cerebral hemorrhage. By subtemporal decompression several clots were removed, but the patient died.

These cases of Doctor Bruggeman's were discussed by Doctors Catlett, L. W. Elston, Wright, Worley, Carlo and B. VanSweringen.

V. Dr. C. A. Savage presented a case of a girl fifteen years of age who was showing a right-sided paralysis, some vomiting and recent disturbance of the glosso pharyngeal nerve. Blood examination showed an eosinophilia. The left disc showed some swelling of the lower half. A small amount of air had been injected into the spinal canal after removal of the cerebral spinal fluid. X-ray showed evidence of a left-sided tumor. Craniotomy revealed a soft necrotic tumor of the left hemisphere which when removed brought away part of the superior sinus which had to be ligated. Later the patient died and autopsy revealed a cyst in the region of the pons. Paper discussed by Doctors Bruggeman and VanBuskirk.

VI. Dr. M. Velkoff presented two hydatid moles and gave a short discussion of this subject as well as of chorio epithelioma. Discussed by Doctors Blosser, Lohman and VanBuskirk.

There being no further business, motion to adjourn was in order, after which there was entertainment of stomachs.

Thirty-two members, five guests, present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building at 8:15 p. m. December 2, 1930. The minutes of the previous meeting were read and accepted.

Doctor Rothschild showed an aorta, with marked vegetations, from a male who had had an aortic lesion for many years. Death in this case was sudden.

The paper of the evening was given by Dr. M. B. Catlett on the subject of intestinal obstruction. The essayist reviewed the symptoms and insisted on early operation in all cases without the so often practiced delay in waiting for the classical text book picture of obstruction. There was a review of seven cases which he had operated. The obstruction in these cases were associated with various other findings, such as cervical carcinoma, kinks in the ileum after purulent appendicitis, and Meckel's diverticulæ.

Discussion was given by Doctors Weaver, Rawles, Wright, Hane, Bruggeman, Zehr and Worley.

A motion was made, seconded and passed that Doctor Rhamy be given a vote of thanks for calling the society's attention to an alleged error in rules of order.

Twenty-seven members, two guests, present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building December 9, 1930, at 8:15 p. m. The minutes of the previous meeting were read and approved.

The scientific paper of the evening was presented by Dr. Doster Buckner on the subject of pelvimetry by x-ray. He reviewed the scarcity of literature and the limitation of the plans already suggested by authors on this subject.

The method which he presented was quite mathematical. However, as a preliminary report the presentation showed quite a commendable piece of original work from which it appears a refined and accurate method of distances can be obtained. The paper was discussed by Doctors VanBuskirk, Truelove, Johnston, Drayer and Rothschild.

The second speaker of the evening was Attorney E. L. Koenemann, who was speaking in the interest of the American School of Honesty. His proposition has to do with the connection of a credit rating bureau and a collection agency for the medical profession. This presentation was to be in the form of a proposition.

Thirty-seven members, three guests, present.

Adjournment.

Secretary.

HANCOCK COUNTY MEDICAL SOCIETY

The Hancock County Medical Society met at the Hotel Bowman, Greenfield, Tuesday evening, December 9th, and enjoyed a splendid dinner and social evening.

The meeting was in honor of Dr. William H. Larrabee, of New Palestine, long a member and past president of this society, who has just been elected congressman from the Sixth District. President C. H. Bruner presided as toastmaster and introduced a number of members who spoke in highest terms of Doctor Larrabee. Dr. E. A. Hawk spoke of Doctor Larrabee's fairness and ethical merits as a colleague. Doctor Larrabee responded and in a brief but fine address expressed his appreciation for the kindly feeling and work done in his behalf in aiding him in his efforts. He pledged his best efforts to do everything in his power to represent his constituency and the people of this district in Congress.

Doctor Ferrell gave a very full report of the state convention at Fort Wayne.

The following officers were elected for 1931:

President—Stewart Slocum.

Vice-president—C. M. Gibbs.

Secretary-Treasurer—Joseph L. Allen.

Board of Censors—C. M. Gibbs, W. H. Larrabee, W. R. Johnston.

Delegate to State Convention—E. R. Gibbs.

Alternate Delegate—J. R. Woods.

Dr. Robert E. Kinnamin was elected to membership.

The society lost one of its valued members, Dr. Ernest R. Sisson, the past year.

Members present at the meeting were Drs. W. H. Larrabee, E. A. Hawk and E. E. Mace, New Palestine; S. Slocum, J. E. Ferrell, S. W. Hervey and C. E. McCord, Fortville; E. R. Gibbs, Wilkinson, W. R. Johnston, Charlottesville; C. H. Bruner, C. M. Gibbs, L. B. Raridan, J. R. Woods and J. L. Allen, Greenfield.

The time of meeting was changed to the first Friday night of each month.

JOSEPH L. ALLEN, M.D.,
Secretary.

WHITLEY COUNTY MEDICAL SOCIETY

December 11, 1930.

The following is the report of the Whitley County Medical Society meeting for the month of December:

Place—Columbia City.

Date and Time—December 9, 1930. Dinner at 6:30.

Speakers—Dr. E. V. Nolt: "Fractures Below the Knee"; and Dr. E. A. Hershey: "Fractures of the Arm."

Election of Officers for 1931:

President—Dr. E. V. Nolt, Columbia City.

Vice-president—Dr. W. E. Wilkin, South Whitley.

Secretary - Treasurer — Dr. P. A. Garber, South Whitley.

Board of Censors—Three years, Doctor Schuman; two years, Doctor Hershey; one year, Doctor Nolt.

Delegate to State Convention—Dr. B. F. Pence, Columbia City.

There are twelve physicians in the county, ten belonging to the Society. The other two refuse to join.

During the past year we have had an average attendance of seventy-two and one-half percent for the twelve meetings held. There were two outside speakers during the year. Fourteen papers were presented by members of our Society.

O. F. LEHMBERG, M.D.
Secretary.

VANDERBURGH COUNTY MEDICAL SOCIETY

Evansville, December 15, 1930.

The regular monthly meeting of the Vanderburgh County Medical Society was held December 9, 1930, at the Public Health Center. The following officers were elected for the current year:

President—Dr. I. C. Barclay.

Vice-president—Dr. H. L. Stanton.

Secretary-Treasurer—Dr. Keith T. Meyer.

Delegate to State Medical Meeting—Dr. L. E. Fritsch.

Censors—Dr. G. C. Johnson, Dr. R. W. Viehe, Dr. W. R. Davidson.

Dr. E. K. Denzer, Dr. Harold Lynch, and Dr. J. E. Welborn were admitted as members to the Vanderburgh County Medical Society.

The speaker for the evening was Dr. F. T. Romberger, Lafayette, who gave an excellent talk on "Spinal Anesthesia."

The annual meeting of the stockholders of the Professional Business Bureau will be held Wednesday, December 17, 1930. At this time the new directors for the current year will be elected.

Dr. Porter H. Linthicum, whose death occurred December 12, 1930, was one of the most prominent physicians of the city of Evansville for years. The death of Doctor Linthicum was a great shock to many of his friends.

KEITH T. MEYER, M.D.
Secretary.

FLOYD COUNTY MEDICAL SOCIETY

The Floyd County Medical Society met in annual meeting at Hutchinson's Presbyterian Church, December 12, 1930, at 8:00 p. m. with Doctor Pierson, the president, presiding, and the following members answered to roll call: Drs. J. W. Baxter, Sr., J. W. Baxter, Jr., Bird, Briscoe, Day, D. F. Davis, Parvin Davis, Edwards, Garner, Gentile, Hall, Leach, McCullough, Pierson, Starr, Schoen, Tyler, Winstandley, Amzi Weaver, William Weaver. Minutes of previous meeting were read and approved. No communications, written or oral.

In addition to annual meeting, this was ladies' night. Most of the doctors were accompanied by their wives. We had with us as guests of honor and visitors Dr. Sam Overstreet and Dr. Carl Schoen, of Louisville; Dr. Marvin L. McClain, of Scottsburg, and Dr. Martin Wolfe, of St. Edwards Hospital.

The Chair appointed the following nominating committee to place in nomination officers for the coming year, Drs. Parvin Davis, Garner and Winstandley, who nominated the following: For president, Dr. Walter J. Leach; vice-president, Dr. Clarence E. Briscoe; secretary-treasurer, Dr. P. H. Schoen; censors, Dr. W. L. Starr, Dr. R. W. Harris and Dr. J. Y. McCullough. Dr. P. H. Schoen was chosen delegate and Dr. W. H. Garner alternate to the state meeting.

Motion was made and seconded to accept the committee report. Motion carried.

The question of unemployment was brought before the society by President Pierson and discussed by him in an endeavor to raise funds for the needy, and turn it into the Welfare Society for general distribution for food, clothing, fuel and medical service. Also what fees would be acceptable to doctors for rendering professional service to indigent patients when ordered by the welfare association. It was agreed to give fifty percent discount from the regular fee. A motion to that effect was made and carried. Doctor Leach, our councilor, gave an interesting and enlightening report of a recent councilor meeting in which he stated that some important legislation affecting the medical profession would likely come up before the next Legislature, especially concerning automobile accident cases.

Preceding the meeting a banquet was served by the ladies of Hutchinson's Presbyterian Church which was a real feast and enjoyed by all. During the serving of the banquet we were enjoyably entertained by several numbers of vocal duets by Messrs. Harry Brown and John Rue, accompanied on the piano by Clifford Slider.

The secretary read his annual report in which he stated that the past year was one of the most successful in the history of the society; that eleven new members were admitted to the society, but two lost by death, Dr. John Hazelwood and Dr. William P. Tebault.. The newly

acquired members were called upon for remarks. All responded reluctantly and said they were proud to be members of the society, and pledged their cooperation and support.

At this time the president, Doctor Pierson, delivered his farewell address in which he thanked the Society for the honor bestowed upon him and for the loyal support of its members during his administration.

This was not a scientific meeting, hence no scientific program; it was business and social only. There being no further business to come before the society, motion to adjourn was made and seconded. Motion carried. Adjourned.

P. H. SCHOEN, M.D.,
Secretary.

WABASH COUNTY MEDICAL SOCIETY

December 5, 1930.

At our regular county medical society meeting held at the Woman's Club, Wabash, December 4th, the following officers were elected for 1931:

President—O. G. Brubaker, M.D.

Vice-president—F. M. Whisler, M.D.

Secretary-Treasurer—Lester B. Rhamy, M.D.

Councilors—James Wilson, M.D., P. G. Moore, M.D., L. E. Jewett, M.D.

Legislative Committee—Ira E. Perry, M.D., James Wilson, M.D., J. L. Walker, M.D.

The president-elect is to appoint the program and entertainment committees.

Our next meeting will be held at North Manchester, Thursday evening, January 1, 1931, as guests of Doctors Perry and Whisler.

O. G. BRUBAKER, M.D.,
Secretary-Treasurer.

WOMAN'S AUXILIARY

Minutes of meeting of Woman's Auxiliary to the Indiana State Medical Association held at Fort Wayne September, 1930:

The Woman's Auxiliary to the Indiana State Medical Association met at a breakfast session at Fort Wayne, September, 1930. The president, Mrs. Austin, of Anderson, gave an address of welcome. The reports of the secretary and treasurer were read and approved.

Reports were read from the following local auxiliaries: Vanderburgh county has forty-nine members with eight meetings during the year. Vigo county has seventy-five members with eight meetings. Indianapolis has 107 members with two regular meetings and one dinner meeting with husbands. Madison county has eighteen members with six meetings.

Mrs. Cregor, director of national organization, gave a very interesting report of the meeting at Detroit. She reported a membership of 12,000 women in the thirty-nine states.

Doctor Bulson addressed the meeting, pointing out some things for the auxiliary to do in a constructive way, classing them in five groups: (1) Educational, (2) Civic, (3) Political, (4) Economic, and (5) Social. In the educational group he stressed the supervision of programs of womens' clubs, and the prevention of the broadcasting of health and food propaganda. He urged that the auxiliaries keep in touch with the health department and that they urge vaccination and regulation of quarantine.

The nominating committee reported the following names: For president-elect, Mrs. A. C. Clauser, of Delphi; for treasurer, Mrs. Freed, of Terre Haute; for secretary, Mrs. Barnes, of Evansville.

Members at large of the Woman's Auxiliary to the Indiana State Medical Association were:

Mrs. George R. Daniels, Marion.
Mrs. G. D. Miller, Logansport.
Mrs. C. M. Jackson, Elizahethtown.
Mrs. O. T. Scamahorn, Pittsboro.
Mrs. W. H. Terrell, Pittsboro.
Mrs. W. A. Thompson, Liberty.
Mrs. Charles Titus, Wilkinson.

Mrs. Austin introduced Mrs. Tomlin, president-elect, who spoke briefly, and the meeting adjourned.

MRS. WILL C. MOORE,
Per Mrs. Ed. Davis,
Recording Secretary.

CORRESPONDENCE

WHAT IS STATE MEDICINE?

Indianapolis, December 20, 1930.

Editor THE JOURNAL:

Much is being said about this subject and excitement concerning it runs high. And yet what is it? Recently the governor's commission has decided that we need several new tuberculosis sanatoria for the treatment of tuberculosis. These will be built and supported by the state or the counties concerned. The physicians in charge will be in the employment of the state, and the patients will be entirely out of the control of their private physicians—if any. For some time several counties and the state have been doing this. Is it state medicine?

Likewise the insane, the feeble minded, and the epileptic have been cared for in much the same way. All of these institutions for defective people are medical to some extent, and all employ physicians to care for their unfortunate inmates. No one objects, we are sure, and yet this is evidently state medicine.

The state educates medical students, and gives an examination in addition to the credits given by the University. It licenses physicians to practice in the state and passes laws to govern medical practice. It attempts to control the use of various drugs, particularly morphine and cocaine, and refuses the physician the right to prescribe alcohol in any form. The state in other words is teaching us therapeutics.

The state assumes responsibility for the control of the infectious diseases; it institutes quarantine; it orders us to report cases of infectious diseases; it compels us to report births and deaths, and if it sees fit can refuse to accept our diagnosis as to the cause of death; it can take the control of an epidemic out of the hands of the practitioner. It assumes responsibility for the medical care of the indigent, using the services of salaried physicians in most cases in order to save money; it furnishes free antitoxin to those who cannot afford to buy it. And who is there to say that most or all of these excursions of the state are not perfectly proper?

The state, or the county, which is the same thing, is furnishing a public health nurse in many communities. School systems have their nurses, and in some instances their physicians. These physicians examine, though they are not supposed to treat, any and all children who may be at school. Occasionally the practicing physicians of a community object to the ministrations of these nurses and school physicians, but for the most part they accept them as an expression of the interest that folks have these days in the health of their children. It is the same interest in better health that is one of the biggest assets that the medical profession has, and it must not be allowed to starve.

Somewhere there must be a border zone between what is an objectionable state medicine, and what is not only perfectly proper but even highly desirable state medicine. The writer would be very glad indeed to know just where it is.

T. B. RICE, M.D.

MIGRATION OF NEEDLE IN PERITONEAL CAVITY

East Chicago, Ind., November 22, 1930.

Editor THE JOURNAL:

An emergency surgical condition which is rarely encountered is the presence of an ordinary sewing needle

within the peritoneal cavity. Dr. T. F. Cotter has given me permission to report such a case which recently has come to our attention.

History: A colored girl, aged six years, was accidentally thrown face downward on the floor, her abdominal wall striking a needle which was held upright by a piece of paper which it had penetrated. She was taken to the office of Dr. T. F. Cotter. She did not complain of pain and had no other symptoms.

Examination showed a small needle hole in the abdominal wall about two inches below and two inches to the left of the umbilicus. An x-ray film taken shortly after the accident showed the needle to lie transversely on a level with the iliac spine. X-ray examination about one hour later at St. Catherine's Hospital showed the needle about four inches above the level of the iliac spine. This point was marked and the child taken to the operating room. A vertical incision was made over this point and extended downward to include the point of entrance of the needle on the skin. A careful search was made for the needle in the fat, fascia, and muscle. The peritoneum was exposed and a search made at the area marked with the aid of the x-ray was unsuccessful in finding the needle, but it was rather quickly located in the omentum after the abdominal cavity was opened, about three inches below the last point at which it was seen on the screen. A small rubber drainage tube was inserted and the abdomen closed. The child made an uneventful recovery except that a bilateral epidemic parotitis developed. She was discharged on the twelfth day after operation.

The purpose of this report is to call attention to a rare emergency. It provides a graphic demonstration of the rapidity with which a needle will migrate from its original location, in this instance moving about three inches in a few minutes after its location on the fluoroscopic screen, and the need to explore immediately after location. It also demonstrates the protective instinct of the omentum, which had completely surrounded the needle in an effort to protect the intestines.

Yours truly,

E. H. TASHKIN, B.S.

THE FULL-TIME HEALTH OFFICER BILL

Indianapolis, January 1, 1931.

Editor THE JOURNAL:

Elsewhere in THE JOURNAL is found a copy of the bill that is being presented to the legislature for the purpose of enabling various counties or groups of counties acting as sanitary districts to hire a full-time health officer if the people of the county see fit. Before one can express an opinion on such a bill it will be necessary for him to read it carefully, and we are urging our readers to do this very thing. Every person, and particularly every doctor, in the state will be affected by this bill if it becomes a law. Now is the time to decide and to write your representative and senator your opinion and wishes.

As might be expected, there are two sides to the matter, the pro and the con. In favor of it may be stated the following principles:

1. The present health law is inadequate. It was first passed in 1891 and was amended in 1909. It provides that the county health officer receive as pay one and one-half cents per capita per year. Figure it up for your own county and remember that the bigger the county the bigger the job.
2. Thirty-six states have such a law already, leaving Indiana at the tail end of the procession. 515 counties have accepted the terms of the law and now have such an officer. Of this number but one has ever refused to reappropriate funds for the continuation of the work. Nearly all have increased their budget for the work, indicating that it is highly satisfactory.
3. "The health of the community is the wealth of the community." No county need assume the expense of a full-time officer unless it chooses by vote to do so. If the full-time health officer is useful in preserving the health of the community he will be cheap at any price. Suppose he should be successful in preventing just one epidemic of typhoid fever or diphtheria a year. Count up the saving.
4. With the present arrangement one of two situations is inevitable: either that the health officer will merely earn what he gets and therefore be of mighty little service to the community, or he will do his work well and be paid as if he were a farm hand.
5. Under the present arrangement many communities are hiring laymen—undertakers, town marshals, public health nurses, and in a few cases chiropractors—for the very good reason that no progressive doctor will have the job. In other communities the poorest doctor in the county gets the job. As a result the whole health program is thrown into disrepute and confusion.
6. The public is sold on the public health nurse idea. It is not at all unlikely that a law soon may be passed making the county health nurse the health officer. When that time comes, if it does, the doctors will smart when she gives them orders.
7. Such a law will do much to keep the health office in the medical profession where it belongs. We have let so many other medical matters slip away from us that it looks as if we might learn. No one can serve as a health officer but a doctor of medicine, or a doctor of public health (usually an M.D. as well), but any Tom, Dick or Harry can serve as a part-time officer.
8. The bill has been approved by the Attorney General of the state as being properly written and constitutional. The principle of the bill has been approved by the American Medical Association, the American Public Health Association, the United States Public Health Service, the International Health Board of the Rockefeller Institute, by the Federated Women's Clubs of Indiana, and by various other organizations.

Opposed to the bill are the following arguments:

1. There are not enough well-trained men for the positions created. In answer to this point we wish to point out that 515 other counties have found such men and are well enough satisfied to wish to continue. By creating a demand we will create a supply of such officers. Furthermore, we would indicate that the part-time officers are not well trained as it is, and cannot afford to train themselves for the work at such wages as they will receive. We happen to know that there are several men in the state who would like such work and would serve well. It is evident that the number of such positions created would not be large at first. In the December number of the *Journal of the American Public Health Association* there were three advertisements of men with the M.D. degree wishing such an appointment.
2. The fear that the job will get into politics is expressed, and this would indeed be a calamity. The bill, however, provides that one of the two men appointed to serve—with the health officer—as the board of health shall be from each of the leading parties.
3. Is this a step toward "state medicine"? Will a full-time health officer assume functions which properly belong to the private physician. It is important that the duties of such an officer be clearly set out. He is to be a "health" officer in the intention of the bill, and should not be allowed to assume any other responsibilities.
4. The scheme is visionary and idealistic and cannot be put into practice according to some. It can hardly be said, however, that a law that is in operation in three-fourths of the states is advanced or purely idealistic.
5. "A good part-time officer would be better than a bad full-time man." Quite true, but it is impossible to get good part-time health officers in many counties, while the full-time official can be carefully selected and discharged if he does not come up to expecta-

tions. The physician who advances this argument must be willing to take the job of part-time health officer if asked to do so because many counties cannot get good officers at the rate of one and one-half cents per capita per year. Besides there is no reason to assume that all part-time officers are good or all full-time ones bad.

6. The matter of expense is very important at the present time. At the rate of twenty-five cents per capita per year a county or sanitary district of fifty thousand population would have twelve thousand five hundred dollars for salary, office expense, transportation, etc. This would be a liberal budget, and surely twenty-five cents apiece is not too much to spend for so important a thing as health. Furthermore, the harder the times are the more important is health.
7. It is feared that the State Board of Health by having the power to refuse to indorse the full-time officer chosen by the local board of health may build up a dangerous power over the health board of the state. The sanction of the State Board of Health over the appointments is, however, the surest way of keeping the office out of local politics.

The writer does not wish excessively the passage of this bill but is extremely anxious that the pros and cons of the matter be given the attention that they deserve. Read the bill and decide for yourself whether it should become a law. Then act accordingly.

THURMAN B. RICE, M.D.

BOOK REVIEWS

Books received since December 1, 1930:

A PRIMER FOR DIABETIC PATIENTS. By Russell M. Wilder, M.D., Professor and Chairman of the Department of Medicine, University of Chicago Clinics; formerly head of the Section on Nutrition, Division of Medicine, Mayo Clinic. Fourth edition. Revised. 138 pages. Cloth. Price $1.50. W. B. Saunders Company, Philadelphia and London, 1930.

MEDICAL BIOMETRY AND STATISTICS. By Raymond Pearl, Sc. D., LL.D., Professor of Biology in the School of Hygiene and Public Health, and in the Medical School, Johns Hopkins University, Baltimore, Md. 459 pages. Second edition, revised and enlarged. Cloth. Price $5.50. W. B. Saunders Company, Philadelphia and London, 1930.

OPERATIVE GYNECOLOGY. By Harry Sturgeon Crossen. M.D., F. A. C. S., Professor of Clinical Gynecology, Washington University School of Medicine and Gynecologist in Chief to the Barnes Hospital and the Washington University Dispensary, etc., and Robert James Crossen, M.D., Instructor in Clinical Gynecology and Obstetrics, Washington University School of Medicine, etc. Fourth edition, illustrated with twelve hundred forty-six illustrations and two color plates. 1078 pages. Cloth. Price $15.00. C. V. Mosby Company, St. Louis, 1930.

MEDICAL JURISPRUDENCE. A Statement of the Law of Forensic Medicine. By Elmer D. Bhothers, B.S., LL.B., Member of the Chicago Bar; Lecturer Emeritus on Jurisprudence in the Medical and Dental Departments of the University of Illinois. Third edition, 309 pages. Cloth. Price $3.50. C. V. Mosby Company, St. Louis, 1930.

A MANUAL OF NORMAL PHYSICAL SIGNS. By Wyndham B. Blanton, B.A., M. D., Assistant Professor of Medicine, Medical College of Virginia. Second edition, 246 pages. Illustrated. Cloth. Price $3.00. The C. V. Mosby Company, St. Louis, 1930.

CHRONIC ARTHRITIS AND RHEUMATOID AFFECTIONS. By Bernard Langdon Wyatt, M.D., F.A.C.P., Director the Wyatt Clinic, etc. With the Collaboration of Louis I. Dublin, Ph.D., Statistician, the Metropolitan Life Insurance Company; and foreword by Dr. J. Van Breemen. 166 pages. Cloth. Price $2.50. William Wood & Company, New York, 1930.

TREATMENT OF EPILEPSY. By Fritz B. Talbot, M.D., Clinical Professor of Pediatrics, Harvard University Medical School, Chief of Children's Medical Department, Massachusetts General Hospital. 308 pages. Cloth. Price $4.00. The Macmillan Company, New York, 1930.

PHYSICAL DIAGNOSIS. By Warren P. Elmer, B.S., M.D., Associate Professor of Clinical Medicine, Washington University, School of Medicine; and W. D. Rose, M.D., Late Associate Professor of Medicine in the University of Arkansas. 903 pages, with 337 illustrations. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1930.

PIERSOL'S HUMAN ANATOMY. Including Structure and Development and Practical Considerations. Ninth edition, revised under the supervision of G. Carl Huber, M.D., Sc.D., Professor of Anatomy; Director of Anatomic Laboratories and Dean of the Graduate School, University of Michigan. 2104 pages with 1734 illustrations, of which 1522 are original and 496 are in color. Cloth. Price $10.00. J. B. Lippincott Company, Philadelphia and London, 1930.

Reviews:

MODERN MEDICINE—ITS THEORY AND PRACTICE. An original contribution by American and foreign authors. Edited by Sir William Osler, Bart, M.D., F.R.S., Late Regius Professor of Medicine, Johns Hopkins University, Baltimore, etc. Third edition, thoroughly vised. Re-edited by Thomas McCrae, M.D., Professor of Medicine in Jefferson Medical College, Philadelphia, Fellow of the Royal College of Physicians, London, etc. Assisted by Elmer H. Funk, M.D., Assistant Professor of Medicine, Jefferson Medical College, Philadelphia. Volume V. Diseases of the blood; diseases of the lymphatic system; diseases of the ductless glands; diseases of the urinary system; vasomotor and glands; diseases of the urinary system. 948 pages. Cloth. Price $9.00. Lea and Febiger, 1927.

VOLUME VI. DISEASES OF THE NERVOUS SYSTEM; DISEASES AND ABNORMALITIES OF THE MIND. Illustrated. 964 pages. Cloth. Price $9.00. Lea and Febiger, 1928.

As is usual with the previous editions of Osler's work, the subject matter is thoroughly condensed and modernized, so that each volume becomes an invaluable reference work for the subjects discussed. One of the most interesting chapters is the concisely condensed one by Harold Jones on the transfusion of blood, wherein are set forth in the briefest spaces possible the indications and contraindications for transfusion, blood-typing, the danger signs during transfusion, the citrate and whole-blood methods, with the advantages and disadvantages of each, and the various conditions for which transfusion is indicated. Jones believes that the indifferent results so frequently reported from transfusion in pernicious anemia may be accounted for by three causes, the improper use of transfusion, permitting too long an interval to elapse between transfusions and giving of too large an amount.

On their chapter on the adrenals Dock and Lisser refer to a certain group of cases of non-nephritic hypertension from adrenal tumors but do not mention the intermittency of the phenomenon that has recently been reported in the literature.

McCræ's article on arthritis deformans is both exhaustive and interesting.

Volume VI is divided into Parts I and II. Part I deals with diseases of the nervous system and Part II with diseases and abnormalities of the mind. A condensed but comprehensive introduction to Part I is offered by Barker followed in order by diseases of the motor system, by Spiller, the combined system diseases of the spinal cord by Russel, sclerosis of the brain, by Bramwell who also writes the next chapter on diseases of the meninges, topical diagnosis of diseases of the brain, by Collins, also aphasia by the same author, intracranial tumors, by Cushing, likewise hydrocephalus, acute encephalitis and brain abscess and epidemic encephalitis by

Southard and Hunt, etc. In his discussion of the treatment of tabes, Sachs declares that the intraspinal method is little short of criminal. In his discussion of treatment of the diseases and abnormalities of the mind in Part II, Strecker stresses the part of prophylaxis.

THE PHYSICIAN THROUGHOUT THE AGES. Two volumes total of 1700 pages. Many illustrations. Edited by Arthur Selwyn-Brown. Cloth. Price $7.50. Springfield Printing and Binding Company, Springfield, Ohio.

As a contribution to scientific medicine, or even to the scientific history of medicine, we doubt if this collection of short articles is of much value. Altogether something near a hundred contributors have taken part in its making. Some of these men are really important, as, for example, Sir William Osler, Raymond Pearl, Hans Zinsser and possibly a few others. Unfortunately we have no reason to believe that most of the others are particularly distinguished. The book has very little organization, but is essentially simply a compilation of short articles most of which are of an historical nature. There is no doubt that many members of the profession will find some of these chapters interesting, but in leafing through we have felt no great urge to read more than was necessary before attempting to write a review.

There seems to be little or no unification and we seriously doubt if any of the writers had any adequate conception of what the others were doing. The author of this review contributed one of the articles in the second volume and is quite sure that when he wrote his part he did not visualize at all the remainder of the book.

Certainly there can be no harm in the books. The motive back of their publication was a most altruistic one—the founding of a home for indigent or aged physicians—and we should like very much to recommend them to the profession for this reason. As a literary production we cannot be so enthusiastic, however. The books are expensive, poorly organized and disjointed. Considering the number of contributors it would be quite remarkable if all were accurate. If the reader likes medical history stories, he will probably enjoy many of these.

INFANT NUTRITION: A Textbook on Infant Feeding for Students and Practitioners of Medicine. By W. McKim Marriott, B.S., M.D., Professor of Pediatrics, Washington University School of Medicine; Physician-in-Chief, St. Louis Children's Hospital. 375 pages. Cloth. Price $5.50. The C. V. Mosby Company, St. Louis, 1930.

The making of this book dates back a good many years and for those who had the good fortune to study pediatrics under the guidance of this author, a very compressive clinical guide was furnished which stressed the outstanding fundamentals of the study of infant nutrition.

A review of the edition of 1930 greatly illustrates how accurate a thinker and observer the author is and has been. The striking contrast between the accepted teaching of 1920 and 1930 impresses one most forcibly that the establishment of a few facts may change, at any time, the accepted methods of practice. The book is full of concise truths, such as the chief gastro-intestinal disturbances of infants—vomiting, diarrhea and constipation, which may wreck any carefully laid plan of feeding. A special consideration is given to anhydremia, acidosis, alkalosis, rickets and tetany. Therapeutic procedures and medication in infancy are welcome subjects thoroughly considered. As a text book for general practitioners its contents are indispensable. As a text book for students one finds desired information clearly placed and up to the last minute. This is a true handbook of infant nutrition.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

MCKESSON'S VITAMIN CONCENTRATE OF COD LIVER OIL.—A cod liver oil concentrate having not less than eleven times the minimum vitamin A potency of cod liver oil, U.S.P., and not less than eleven times the vitamin D potency of a potent cod liver oil used as a standard. The product possesses properties similar to those of cod liver oil so far as these depend on the fat soluble vitamin content of the latter. McKesson and Robbins, Inc., Bridgeport, Conn. *(Jour. A. M. A.,* November 1, 1930, p. 1347.)

MALTINE WITH COD LIVER OIL AND IRON IODIDE.—This product is composed of maltine, 70 per cent, cod liver oil, 30 per cent, and ferrous iodide, 0.44 Gm. per hundred cc. (2 grains to each fluid ounce.) Maltine is a preparation essentially similar to extract of malt, U.S.P., but it contains 3.88 per cent of alcohol, is prepared from malted barley, oats and wheat; its vitamin B1 and B2 content and its starch converting power is controlled by assay. Maltine with cod liver oil and iron iodide contains in 100 cc. from 23,000 to 25,000 vitamin A units as determined by the U. S. Pharmacopeia assay and its vitamin D potency is controlled by assay. Maltine Company, Brooklyn, N. Y.

DIPHTHERIA TOXOID.—A diphtheria toxoid (New and Nonofficial Remedies, 1930, p. 364) prepared from diphtheria toxin of which the L+ dose is 0.2 cc. or less. The toxin is treated with formaldehyde and is tested for antigenic power. The finished product is adjusted to contain in 2 cc. enough of the toxoid for one immunization treatment. It is marketed in packages of one immunization treatment. Lederle Laboratories, Inc., Pearl River, N. Y. *(Jour. A. M. A.,* November 15, 1930, p. 1505.)

AMPOULE STERILE SOLUTION DEXTROSE, U.S.P., 5 GM., 10 CC.—Each ampule contains dextrose, U.S.P., 5 Gm., in distilled water to make 10 cc. E. S. Miller Laboratories, Inc., Los Angeles.

AMPOULE STERILE SOLUTION DEXTROSE, U.S.P., 10 GM., 20 CC.—Each ampule contains dextrose, U.S.P., 10 Gm., in distilled water to make 20 cc. E. S. Miller Laboratories, Inc., Los Angeles.

AMPOULE STERILE SOLUTION DEXTROSE, U.S.P., 25 GM., 50 CC.— Each ampule contains dextrose, U.S.P., 25 Gm., in distilled water to make 50 cc. E. S. Miller Laboratories, Inc., Los Angeles.

DEXTROSE (D-GLUCOSE) UNBUFFERED AND WITHOUT PRESERVATIVE, 10 GM., 20 CC. AMPUL.—Each ampule contains dextrose, U.S.P., 10 Gm., in distilled water to make 20 cc. H. K. Mulford Co., Philadelphia.

DEXTROSE (D-GLUCOSE) UNBUFFERED AND WITHOUT PRESERVATIVE, 10 GM., 20 CC. AMPULE.—Each ampule contains dextrose, U.S.P., 25 Gm., in distilled water to make 50 cc.; accompanied by an ampule of 2 cc of a buffer solution. H. K. Mulford Co., Philadelphia.

DEXTROSE (D-GLUCOSE) UNBUFFERED AND WITHOUT PRESERVATIVE, 25 GM., 50 CC. DOUBLE END VIAL.—Each double end vial contains dextrose, U.S.P., 25 Gm., in distilled water to make 50 cc.; accompanied by an ampule of 2 cc. of a buffer solution. H. K. Mulford Co., Philadelphia.

DEXTROSE (D-GLUCOSE) UNBUFFERED AND WITHOUT PRESERVATIVE, 50 GM., 100 CC. AMPULE.—Each ampule contains dextrose, U.S.P., 50 Gm., in distilled water to make 100 cc.; accompanied by an ampule of 4 cc. of a buffer solution. H. K. Mulford Co., Philadelphia.

VENTRICULIN.—Desiccated, defatted, hog stomach.—It is assayed clinically by observation of the reticulocyte response, the standard being an increase of red blood cells

at the rate of about one hundred thousand cells per cubic millimeter per week when the product is administered to patients suffering from pernicious anemia. Stomach tissue of animals has been shown to contain a principle capable of stimulating the bone marrow to form immature red cells in large numbers. When, during the first ten to fifteen days treatment with ventriculin, a satisfactory rise in reticulocytes occurs, this is evidence that effective and progressive blood regeneration is taking place. Ventriculin is supplied in the form of a powder in vials containing 10 Gm. Parke, Davis & Co., Detroit. *(Jour. A. M. A.,* November 22, 1930, p. 1589.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

PET UNSWEETENED EVAPORATED MILK (Pet Milk Co., St. Louis).—An unsweetened evaporated milk complying with the U. S. Department of Agriculture definition and standard for evaporated milk. The composition of the product is: total solids, 25.5 to 26.5 per cent; ash, 1.5 to 1.6 per cent; protein, 7.0 to 8.2 per cent; fat, 7.8 to 8.2 per cent; lactose, 9.5 to 10 per cent. The product may be used for cooking, baking and other purposes as is ordinary milk.

ALACTA (Mead Johnson & Co., Evansville, Ind.).—A dried, partially defatted milk designed for infant feeding formulas in which low fat content is desired. The approximate composition of the product is: moisture, 1.5 per cent; mineral salts, 7 per cent; milk fat, 12 per cent; protein, 33 per cent; lactose, 46.5 per cent. Diluted alacta may be employed in milk formulas in which a low milk-fat content is desired. *(Jour. A. M. A.,* November 15, 1930, p. 1505.)

PROPAGANDA FOR REFORM

BASY BREAD.—About twelve years ago Basy Bread was sold under such claims as "Three Slices a Day Will Drive the Fat Away". At that time the manufacturer stated that it was made from coarse-ground, hard whole wheat, preserved and sweetened with ground figs and containing vinegar, salt and water. At that time Dr. Harvey W. Wiley summed up the case against this nostrum thus: "There is one way in which Basy Bread will reduce; that is, don't eat any of it, nor much of any other kind". The joker in the Basy Bread exploitation lay in the fact that the person who was using Basy Bread was told that she must greatly diminish the amount of bread, potatoes, oils, fats and sugars in the diet while using the "bread". Quite naturally, the obese could have reduced just as effectively had they followed the instructions that came with the Basy Bread and thrown the "bread" itself in the garbage can. During the past year the American Institute of Baking analyzed the Basy Bread that is found on the market. This analysis showed that the energy value of Basy Bread is more than equal to that of average graham bread and is almost equal to that of white bread. Obviously Dr. Wiley's statement of many years ago is just as applicable to Basy Bread today as it was when it was written. For all practical purposes, however, the obese who reduce by the Basy Bread method are being "kidded by experts". *(Jour. A. M. A.,* October 18, 1930, p. 1194)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Red Caps (Campbell Laboratories), capsules containing antipyrine, asafetida, podophyllin, red pepper, starch and a trace of alkaloids. Gasidal (Gasidal Company), consisting essentially of baking soda, magnesium carbonate, bismuth subnitrate, and starch, flavored with peppermint. Stout's Cold Tablets (D. C. Leo and Company), containing acetanilide, alkaloids of nux vomica, and extracts of plant drugs, including a laxative drug. Flu-Caps (Murray C. Kalis and Company), capsules containing red pepper, ginger, aloin, acetanilide, asafedita, camphor, epsom salt and a laxative plant drug. Kidder's Cold and Grippe Tablets (Samuel Kidder and Company), containing phenacetine, salol, caffeine and citric acid. Klein's Cold and Grippe Capsules (Brewer and Company), containing acetanilide, cinchona alkaloids, phenolphthalein, aloin, sugar and starch. *(Jour. A. M. A.,* October 18, 1930, p. 1194)

THE ADVERTISING OF THE DENTIFRICE.—The early part of the twentieth century may be interesting historically for the fact that it witnessed the apothesis of the tooth brush, the tooth paste and the mouth wash. So far as mouth washes are concerned, their virtues may lie in a slight astringency or alkalinity, in the mildly antiseptic influence they exert for a brief period, or more probably in the fact that they contain enough water to provide a lavage appealing to the organoleptic senses. "Halitosis" gave to Listerine a sales impulse that no other mouth wash has ever been able to equal. The fact that the combination of substances included in Listerine is relatively ineffective and will not cure halitosis did not lessen the sales impulse. Recently, the Food and Drug Administration has cast a critical eye over the claims for antiseptic value made for various mouth washes and gargles. It is currently reported that the owners of all these bringers of gold are rushing hither and thither to the laboratories searching for substances that really are antiseptics and that can be added to their concoctions without changing taste or color—the important qualities—that the claims may be justified. Recently, dentifrices have been widely exploited with various claims. A half dozen assorted chemists and the commissioner of health of New York assert that low surface tension means that a toothpaste will penetrate better between the teeth. The claim of special value because of low surface tension in connection with the selling of any tooth paste is one hundred per cent hokum. Any mixture of soap, glycerin and chalk, such as is available in many tooth pastes, would be equally endowed with a low surface tension. The council on dental therapeutics of the American Dental Association is now making efforts to secure restriction of the claims for dentifrices and physicians should do all that they can to aid the American Dental Association in this campaign. *(Jour. A. M. A.,* October 25, 1930, p. 1267)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Michael's Cold Tablets (C. P. Products Company), containing, essentially, acetanilide, sugar, talc, red pepper and a small amount of the laxative phenolphthalein. Mosso's Oil of Salt (C. A. Mosso Laboratories), consisting essentially of linseed oil, oil of turpentine, camphor and phenol. Nozeline (Nozeline Laboratory), consisting essentially of mineral oil, containing about 2 per cent of volatile matter, including eucalyptol, oil of pine, menthol and camphor. Laxacold (Nyal Company), containing acetanilide, alkaloids of aconite and of cinchona, extracts of plant drugs, including podophyllum and jalap, with camphor, red pepper, sulphates, and a small amount of salicylates. Nyal Cold Capsules (Nyal Company), containing acetanilide, chalk, cinchonine sulphate, and small amounts of red pepper, camphor, podophyllin, and the alkaloids of aconite. Diemer's Laxative Grip and Cold Tablets (Sta-Wel Remedy Company), containing acetanilide, baking soda, red pepper and some laxative drugs. Reno's Antiseptic Wash (S. B. Leonardi and Company), consisting essentially of water (99 per cent) and small amounts of boric acid, camphor, and a trace of alkaloids. Devel's Grippe (Devel's Chemical Company), consisting essentially of extracts of plant drugs, including licorice and a laxative plant drug, with saccharine and volatile oils, including oil of anise, in a solution of alcohol and water. Dionol (Dionol Company), consisting of white petrolatum. *(Jour. A. M. A.,* October 25, 1930, p. 1280)

(Continued on adv. page xx)

EYE-STRAIN



THEY REFUSE TO TAKE THEIR MEDICINE

IN every medical practice there are patients who through stubbornness or lack of understanding refuse to take their "medicine". As a result they suffer unnecessarily.

In every optical practice, there are people who because of pride or fear will not wear glasses. They even go so far as to delay for many years having an eyesight examination they know is needed.



As one effective means of overcoming this prejudice, glasses are being made more and more becoming. The greatest step forward toward more becoming glasses is the new Ful-vue frame. We urge that you prescribe and recommend glasses that are modern, stylish and becoming.

AO

Ful-vue smart and practical

- Temples joined high up on the eyewire.
- Becoming "Streamline" from ear to ear across the nose.
- Reveals the eyes from the side.
- Eyeshape harmonizes with facial contours.
- Complexion pink color.
- Permits more exact fitting.
- Adjustments surer and more permanent.

J35

AMERICAN OPTICAL COMPANY

TRUTH ABOUT MEDICINES

(Continued from page 68)

ALBUTESTA, A PROPRIETARY REAGENT.—The A. M. A. Chemical Laboratory reports that Albutesta is a coined name for a chemical reagent to detect albumin in urine. The makers of this product, Menley and James of London, England, and also of New York, have been noted in the past for unscientific proprietaries. One of these is "Iodex" for which the firm has claimed that it contained 5 per cent of free iodin, although the A. M. A. Chemical Laboratory showed, first, that the product did not contain iodin in the free form but in the combined form and secondly, that there was less than five per cent of total iodin present. The Laboratory later analyzed the companion proprietary "Liquid Iodex" which was claimed to be a nonirritant preparation of iodin and to contain "free iodine," and found it to contain only about 0.16 percent free iodin and about three-fifths of the total iodin claimed. The Laboratory found "Albutesta" to be nothing more than a solution of sulpho-salicylic acid, a substance well known as a clinical reagent for albumin. The Laboratory points out that while "Albutesta" sells for one dollar, the cost of the ingredients of one ounce of such a solution is about five cents. Since the identity of "Albutesta" is not declared by Menley and James, the Laboratory reminds us that it is almost axiomatic that an analyst must know the composition or definite attributes of reagents he is using if he expects to be at all scientific. *(Jour. A. M. A.,* November 1, 1930, p. 1347.)

COFFEY-HUMBER TREATMENT FOR CANCER.—Recent developments in the Coffey-Humber treatment of cancer emphasize the fact that the history of investigations of new methods for the treatment of cancer is marked by the wreckage of dozens of scientific reputations, by the bodies of patients, and by bitter controversy among scientific men. Such conditions establish again the importance of provision within organized medicine for careful study and judgment of new methods before they are given circulation to the medical profession or to the public. Had the proponents of the Coffey-Humber method seen fit from the first to follow established custom in the introduction of their technic and their results, had they consulted the Council on Pharmacy and Chemistry as to the proper method of introducing a new proprietary, they might have avoided all the acrimony, the criticism, and certainly all the notoriety that has been their lot. *(Jour. A. M. A.,* November 1, 1930, p. 1349.)

THREE HUNDRED YEARS OF THE CINCHONAS IN MEDICINE.—The exact date of the introduction of the use of cinchona bark into medicine is somewhat uncertain. Its introduction into medicine dates from about 1630; in 1630 Juan Lopez Canizares was the first to demonstrate the use of the bark of the cinchona tree in the treatment of malaria. Quinine itself was isolated more than a century ago by Caventon and Pelletier. Quinine is commonly described as a protoplasmic poison and it is alleged to produce its effects in the body because of this property; the action being strongest on undifferential protoplasm. The comparative safety in the use of the drug is indicated by the fact that fatalities from its use have been exceedingly few. The excelling virtues of the alkaloid in modern medicine remains in its selective toxicity to undifferentiated protoplasm, notably to the plasmodia of malaria. Quinine is part of the "standard" treatment of malaria. Osler said many years ago that the physician who at this day cannot treat malarial fever successfully with quinine should abandon the practice of medicine. *(Jour. A. M. A.,* November 1, 1930, p. 1350.)

HORMONE AND CANCER.—The effort to influence the growth of cancer by various organ extracts is being widely made at present. Logically it might be profitable to inquire why such trials are being made since every pathologist sees cancer growing freely in those organs whose hormonic activity is high. The work of Bischoff and his colleagues should be repeated with a tumor that does not spontaneously recede and, if the results are the same, should close the discussion on the possible therapeutic action of extracts from the group of organs tested. *(Jour. A. M. A.,* November 1, 1930, p. 1350.)

SANOVAPOR, ANOTHER CURE-ALL OF THE LIQUOZONE TYPE.—Sanovapor Laboratories, of Huntington, West Virginia, put out a nostrum, Sanovapor, that was recommended for catarrh, colds, hay fever, asthma and many other conditions including halitosis. Sanovapor seems to have been especially pushed as a remedy for diabetes. Analysis in the A. M. A. Chemical Laboratory showed the preparation to consist essentially of a solution containing approximately 0.06 Gm. of sulphur dioxide and 0.17 Gm. of sulphuric acid, U. S. P., in 100 cc. It is evident that Sanovapor is of the same general character as Radam's Microbe Killer, Liquozone, Septicide, Oxytonic, Zymatoid and Anti-Phymin. *(Jour. A. M. A.,* November 1, 1930, p. 1365.)

INTOXICATING EFFECT OF ACETYLSALICYLIC ACID AND COCA COLA.—A physician reports that young people in his community are using from 15 to 20 grains of acetylsalicylic acid (aspirin) dissolved in the soft drink, Coca Cola, as an intoxicating beverage. The effects are due chiefly to central depression caused by the acetylsalicylic acid fortified possibly by a direct central stimulant action of caffeine and other constituents present in Coca Cola. The actions of acetylsalicylic acid are similar to those of small doses of alcohol, or of a weak alcoholic beverage or of the barbitals or bromides. When acetylsalicylic acid is taken with a beverage like Coca Cola, advertised for its exhilarating effects, which may be caused by a direct central stimulation by caffeine or other constituents of the latter, it is easy to see how the effects of one can be fortified by the other. The continued use of such a medicated beverage may result in undesirable effects of the same general nature as those of narcotic habituation. Here is a most insidious evil, the reenforcement of a popular and highly advertised beverage by a well advertised drug, both long suspected of dangerous tendencies. *(Jour. A. M. A.,* November 1, 1930, p. 1366.)

SODIUM 2-OXO-5-IODO-PYRIDINE-N-ACETATE (Introduced as Uroselectan).—The Council on Pharmacy and Chemistry publishes a preliminary report on sodium 2-oxo-5-iodo-pyridine-N-acetate (also designated as sodium 5-iodo-2-pyridon-N-acetate) a new substance for use in the radiographic visualization of the urinary tract which was introduced under the name Uroselectan. The Council reports that the product is a definite chemical substance which promises to be an advance in the radiographic visualization of the urinary tract, though its indications, advantages and limitations are at the present time not fully established. The Council considers the product suitable for experimental use by those who are versed in the technique of urologic examinations. It publishes a concise and carefully considered statement of the introduction of the drug and the evidence for its use, prepared for the Council by Drs. Braasch and Bumpus. *(Jour. A. M. A.,* November 8, 1930, p. 1425.)

DISULPHAMIN (American Bio-Chemical Laboratories, Inc.).—According to an advertising circular, Disulphamin is chemically "Amino-Orto-Benzoil-di-Sulpho-Nucleo-Formin-Sodium-Bicamphorated." According to another circular it is chemically "orto-oxibenzoyl-sulphon-nucleino - formol-sodium - tetradimethylamino - antipyrin-bicamphorated." These designations are meaningless to chemists. They resemble other instances of pseudo-scientific terminology wherein names of a chemical group, appearing as part of the name of this or that ingredient, are strung along to form an impressive sounding designation. Good evidence should be supplied to show that one or the other designation applies to the product marketed as Disulphamin before this product is given serious consideration by physicians. *(Jour. A. M. A.,* November 29, 1930, p. 1689.)

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ORIGINAL ARTICLES

THE IMPORTANCE OF THE HISTORY AND PHYSICAL EXAMINATION IN DIAGNOSIS*

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CHICAGO

As dependable laboratory tests have multiplied, as new instruments of accuracy have been devised, as specialists have become more proficient, there has developed gradually and insidiously a tendency among physicians to rely more and more on these aids to diagnosis and to neglect the older methods of history taking and physical examination. That x-ray, Wassermann test, cystoscopy are not only helpful but often indispensable is not denied. These and other similar diagnostic procedures have come to stay and their number will be increased. The reactionary doctor who feels a prejudice against the new, who relies on his experience and "hunches"—by which he means his keen powers of observation—makes a sad blunder when he stubbornly refuses to admit the immense worth of these newer methods. Their increasing importance has resulted in a lessened relative value of physical examination and history.

But there still remains an appreciable absolute value to these older methods, physical examination and history taking. It is the purpose of this paper to consider some of the reasons why these methods should not be forgotten and what should be the physician's attitude toward the newer methods. This is not a plea for the one method as opposed to the other. The methods are not to be viewed as in opposition. They should be regarded as mutually helpful.

In a preliminary way let me state that rules as to manner of reaching a diagnosis should not be too fixed and arbitrary. Thus, as to order of procedure, our undergraduates are taught to take up first the family history, then the personal past history, the history of the present illness, physical examination, etc., finally reaching the point where the laboratory and instrumental findings are considered. This is the logical order and usually can be profitably followed.

*Presented before the General Scientific meeting of the Indiana State Medical Association at the Fort Wayne session, September 24, 1930.

But in practice this order properly may be violated because of various circumstances. The character of an illness may upset traditional rules. An obscure, chronic malady may demand all the resources of old and new methods and may require much time and orderly procedure for a decision. An acute, serious condition, however, may wreck all formal programs. Facts of past history, blood counts or electrocardiograms may be brushed aside because of the overwhelming importance of the symptoms and signs of the immediate present. A trivial ailment recognizable at sight, *e. g.*, scabies, a scalp wound, justifies the omission of many details of examination.

Also, it must not be expected that any two doctors will reach a diagnosis in exactly the same manner. One, almost ignoring history, at once makes a physical examination. He diagnoses a Pott's fracture, a scarlet fever, an impending miscarriage, a glaucoma. Another before physical examination, by his careful analysis of the history, makes a tentative diagnosis of gall-stones, duodenal ulcer, or tuberculosis of the hip joint. Still another considers almost exclusively the findings of the x-ray or of the chemical laboratory. They have reached their destination by various routes. The man who is quick in his mental activities goes by the direct, straight-ahead road; the other takes the longer, perhaps safer, detour. Each man has his own way and within limits should not be forced by arbitrary rules to adopt the method to which he is not accustomed or not suited.

The History: History taking is an art. Some doctors never acquire it. Others come by it naturally. In the hands of the skilled examiner the patient freely unfolds the history that does so much to explain the causes and the nature of the disease. The unskilled examiner makes the patient ill at ease or even suspicious; often insists that statements be restricted to the bald answers to questions. The questioner should be *en rapport* with the patient, who should be made to feel that the truth, the whole truth, is what is desired and that this is for his own good. The cross examiner is his friend and not, as is so often the case in the court room, his adversary trying to trip him up or to prove him a falsifier.

Right here I have three stories to tell, each one of which illustrates a point regarding history taking.

The medical student in the dispensary was assigned to the first patient whom he had ever interviewed. This patient happened to be an attractive, pert, rather sophisticated young lady of eighteen. She sized up the situation, was self-possessed and seemed amused. She waited for him to do the talking. Flustered, blushing and evidently ill at ease, he cast a nervous glance at the outline prepared for the students, saw the first heading was "Family History" and blurted out: "Well, how's all the folks?" She laughed, he laughed, the embarrassment disappeared and he had no further trouble. The lesson: It may be hard to get started, but get a start and a pleasant one if possible.

The attending man by a pointed question or two and by encouraging the intelligent patient to talk had drawn out a new fact in the history that clearly suggested gall-stone colic. The astonished intern indignantly demanded of the patient: "Why didn't you tell this to *me* when I was getting your history yesterday?" "Because, young man," quietly said the patient, "you hushed me up when I started to describe the attack, sharply telling me to answer questions and not to volunteer information. Besides you didn't ask these questions that Doctor X has just asked." Lesson: While at times a voluble and garrulous patient must be headed off and kept to the subject, much is often learned by permitting or encouraging the patient to talk.

The patient was evidently trying to conceal an important fact as to the severity and location of pain, apparently fearing it would lead to a diagnosis of a serious surgical trouble. She kept evading my efforts to get a frank statement. I became irritated, and testily said to the daughter: "Will you please make your mother answer my questions instead of dodging them. She must understand these questions and answers are an important part of the examination." "It seems to be a *cross* examination, doctor," sweetly said the bright daughter, "I'll see what I can do." I then realized that the examination had been cross. When it was pleasant, as it immediately was when the daughter called me to time, we got along famously and the desired information was forthcoming. Lesson: One may be stern or severe and win, but to lose one's temper and be cross nearly always means losing the advantage.

There is a tradition that a good history is fifty percent of the diagnosis. Without presuming to attach a definite numerical percentage value to the history it is safe to say that it is a high figure. The trouble is we too often forget its importance as we are attracted to the newer methods.

In order to show its importance it is not necessary to repeat what is well known—the value of a knowledge of heredity in cases of neoplasm, early cardiovascular disease, migraine, neuroses; the importance of facts in the previous personal history such as suspicious luetic symptoms, occupation, other similar attacks, rejection on life insurance examination because of high blood pressure; albuminuria, heart murmur, previous operations; the worth of details as to the onset and progress of the present illness, just how the fracture or dislocation occurred, the exact location of pain, the very first symptom, etc. It is not necessary to repeat these facts, though it may be in place to refer to them because they are so easily forgotten.

Again I have three stories that seem to me instructive as illustrating the value of the history.

A peripheral neuritis in an adult woman which resembled in every particular alcoholic neuritis. A denial by the patient and her husband of alcoholism; the doctor sure there was nothing of the sort. I then, perhaps rashly, cornered the Irish maid when there was no one else about and catching her off her guard suddenly said: "Ellen, how much whiskey does your mistress drink?" "About a pint, sor, is what I gets from the drug store every day." The husband, confronted with the fact, admitted not only that he knew it but that every evening he joined his wife in drinking. He had felt ashamed to admit to his family doctor the real truth in the matter.

I suspected a gonorrhœal arthritis and salpingitis. The family doctor refused to be a party to asking the husband as to recent gonorrhœa. It was an unwarranted insult, he had treated the family for fifteen years and would vouch for it that no such condition was possible. I assumed the responsibility. A direct question to the husband met with a frank admission. He had had the disease a few weeks before. The doctor was crestfallen and apologetic.

The methods employed in these two cases are not always wise or safe, but they are at times justifiable and sometimes get helpful information.

During an epidemic of typhoid fever in the nineties I examined thoroughly a patient who had been ill for four days, and announced that he had typhoid. I explained the nature of the disease and wrote minute directions for the mother to follow—she was to act as nurse. Just as I was leaving, the patient called to me: "Doc, would you mind looking at my leg, I skinned it the other day when a truck bumped into me." I looked and there was an erysipelas in full bloom starting from a skinned area on the shin. I changed my diagnosis on the spot, the mother graciously forgave me, stating rather maliciously that she hadn't taken much stock in the typhoid story because her son didn't look and act like the patients she had seen, which were many. I left the house, a wiser and a sadder man, with a resolve to regard no examination as thorough until I had looked below the knees clear down to the toes and no history complete unless I had inquired as to shins being barked by collision with trucks.

Physical Examination: Is physical examination to become a lost art because useless? Should we no longer feel for an enlarged spleen, a presystolic thrill? Are we to give up the attempt to locate by percussion an infiltrated area in the lung or fluid in the pleural cavity? Are we to discard the stethoscope and cardiac murmurs and bronchial breathing and rely on the x-ray and electrocardiograph? These are not idle questions. Men high in esteem have said that the stethoscope is passe', replaced by the x-ray. Sir James Mackenzie and Sir Thomas Lewis have declared that more harm than good has come from the use of the stethoscope in the diagnosis of heart disease. Our medical teachers are, unconsciously perhaps, leading our undergraduates to place the emphasis on the instrument of precision rather than on the eye, ear, hand of the physical examiner. Is this right? I think not.

The two main objections to the stethoscope—and we may let the stethoscope stand in a general way for physical examination as a whole—are that it is antiquated, its place taken by other methods, especially by the x-ray, and that it does more harm than good because its findings are so often misinterpreted.

We must admit that the x-ray has shown us many shortcomings of the stethoscope. We have all been astonished and chagrined to see in the chest film the aneurysm or the apical infiltration that our ears had missed. This should lead us to use the x-ray more often, but we should not on this account abandon auscultation and percussion. We should rather renew our efforts to perfect ourselves in the art of examination with x-ray check on our findings.

There is a side to this question that is often not considered. I have touched upon it in an article recently published, "In Defense of the Stethoscope,"* from which I take the liberty of quoting rather freely.

The stethoscope may discover disease that escapes the x-ray. A few rales at an apex, associated with a cough, slight temperature and expectoration may be more convincing than the film that shows no lesion or only suggests it. A pleural or pericardial friction or a diastolic murmur may furnish unmistakable evidence of organic disease that is not shown by x-ray. No x-ray film or even fluoroscopic examination can convey the sense of strength or weakness that is revealed when the trained hand palpates the region of the laboring heart or the stethoscope detects the murmur at apex or base and brings out the character of the closing sounds of aortic and pulmonic valves. The x-ray discloses the size and shape of the heart, but not its behavior in action, at least as regards sound and strength. To see a photograph of a tired horse stumblingly hauling a heavy load up a hill gives evidence as to the efficiency of the horse. In addition, to hear him puff and wheeze, to hear the wagon creak and the whip crack yields important information as to the ability of the horse to carry the load to its destination.

The electrocardiograph is of great value, to be used more and more until perhaps employed in every complete examination as much as pulse counting, blood pressure reading, urinalysis. Yet many facts concerning the heart and its efficiency are not recorded by the electrocardiograph. They are discovered only by physical examination and a study of the history, which methods must still be regarded as our most useful means of diagnosis of cardiac disease.

The second objection to the stethoscope is that because its findings are so often misinterpreted it does more harm than good.

Again we must admit justice in the criticism. A few rales with a roughened expiratory tone, or a murmur at the apex of the heart, and the uninformed or impulsive doctor, or the over-conscientious doctor who feels that in the interest of his patient he must recognize heart disease or tuberculosis in the incipient or hopeful stage, makes a diagnosis of tuberculosis or heart disease with all the penalties thereunto appertaining—psychic upset, altered modes of living and change in occupation. On the basis of the one finding, with disregard of other features, he has jumped to a disastrous conclusion that may be wrong. No wonder the critics cry: "Away with the stethoscope!"

Now the same argument may be used against almost any other aid to diagnosis, the clinical thermometer, the sphygmomanometer, the Wassermann test, the reaction for albumen in the urine, the leucocyte count, the facts in a history. Are not their results misinterpreted again and again? Some physicians have said the Wassermann reaction was a curse, for at times positive when there was no syphilis, oftener negative when syphilis exists, it has led to many errors. Others have rebelled against the emphasis laid on casts and albumen in the urine. That blood pressure—too high or too low—is made too much of by the laity and many doctors is well known. And the sins committed in getting histories, not alone sins of omission but of commission as well, the wrong interpretation of headache, vomiting, dyspnœa, cough! One has no difficulty in making a long list of misinterpretations along these various lines. Why, then, should the stethoscope be the instrument singled out as the criminal whose sentence is to be banishment when others are also guilty, at times even more guilty?

The greatest outcry against the stethoscope has come from those who deplore the fact that the systolic murmur revealed by this instrument so often means nothing pathologic, yet is regarded by the injudicious examiner as an indication of organic heart disease.

Admitting the frequent misinterpretation of the so-called accidental murmur, should we in cow-

Annals of Internal Medicine, August, 1930.

ardly fashion decline to listen for it or admit its presence or discuss its significance for fear we may misinterpret it? It is up to us to decide whether it means nothing or something. The fault is in us and not in the stethoscope. We should discard our error and not the instrument.

Furthermore, granting that the murmur is by no means the sole criterion of a disease of the heart or of a heart's efficiency, it is worth something in a negative way to examine and find no murmur. It may be a comforting bit of evidence that the heart is all right. We do not exclude tuberculosis because the thermometer, the sputum examination or the x-ray fail to show change from the normal, but we rightly give these negative findings weight in trying to reach a decision. Similarly the stethoscope has a function to perform in excluding the presence of murmurs.

What I have tried to stress thus far is that there should not be a spirit of antagonism between the advocates of diagnosis by the newer laboratory and instrumental methods and those who still stick to the older methods. The spirit should be one of cooperation. The one method is complementary or supplementary to the other. This plea is not for the exclusion of laboratory and instruments of precision, but it is against relegating to the junk heap the older methods of anamnesis and physical examination.

We should remember, too, that the interpretation of an electrocardiogram, an x-ray film, a laboratory color reaction, a bit of tissue under the microscope—all these interpretations depend on the action of a human brain. That brain may be in error in the laboratory as well as when connected with the earpieces of a stethoscope. The optic nerve may err as well as the auditory.

Besides, not all instruments of precision are as precise as they are sometimes thought to be. Many laboratory tests are not infallible—they are only approximately accurate. The electrocardiograph has a strange way of misbehaving at times; x-ray films taken by different operators or even by the same operator with slightly varying technique give pictures so different as to make interpretation difficult. Different laboratories do not always agree as to the Wassermann test on the same specimen of blood. So, when reports come to us as to findings and especially if the reports are interpreted by technicians in terms of clinical pathology and disease we must be on our guard against accepting as a final decision what should really be viewed only as contributory evidence.

An important duty falls to the lot of the physician, that of putting together and interpreting the results of the history, physical examination, laboratory and instrumental findings and perhaps those of the specialist. He must know the relative value and the shortcomings of each method. He must fit the facts together so as to make a coherent whole. His diagnosis must not be the result of a routine assembling of parts. He is dealing not with a machine but with a living, sentient human being.

Moreover, he is dealing not with human beings as a group or class. His concern is with one individual. The question confronting him is not what does the lesion revealed by the x-ray or the laboratory mean in general but what does it mean to this particular patient. Granted that there are gall-stones or a tuberculosis of the lung or a syphilis of the aorta, what does this mean to this particular patient? Does it explain his illness? What prognosis is warranted? What treatment is indicated? No robot mechanism can answer these questions in a human, humane and satisfying manner. The physician is to be the liaison officer between his patient and the revelations of a thoroughly up-to-date examination. He must, therefore, not only know medicine as a science but he must know his patient. One of the strongest claims for the retention of these older methods of diagnosis is that they keep the physician in close personal touch with the patient. Without that intimate contact many of the facts revealed by the various processes of diagnosis are not applied properly and their value is lost; without that contact the practice of medicine loses much of its worth, much of its dignity and charm as a helpful, sympathetic profession.

FAMILIAL VON RECKLINGHAUSEN'S DISEASE WITH UNUSUAL MANIFESTATIONS*

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For the last quarter of a century there have been numerous reports of cases in the literature concerning von Recklinghausen's disease or as it is more properly called, neurofibromatosis. It was von Recklinghausen who first called attention to the association of multiple neuromas and cutaneous fibromas as a definite entity which he called neurofibromatosis. This was in 1882. Since that time there has been considerable clinical and pathological study with the result that today we think of the disease as a clinical syndrome consisting of four definite aspects, namely; pigmentations of the skin, subcutaneous tumors, cutaneous tumors and mild mental deterioration. The disease is frequently congenital. The finding of these symptoms in whole or in part generally warrants the diagnosis of Recklinghausen's disease; an absolute diagnosis in some instances being made only after careful biopsy studies.

The most probable theory as to the etiology is that based on embryological development. It is presumed that there has been a disturbance of the normal development of the specific elements of the nervous system which later differentiate themselves into ganglional, glial and nerve fibre

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cells. At one time it was thought that the cells of the tumors of neurofibromatosis were purely connective tissue and at other times they have been considered nerve cells. At present it is thought that these cells are of a peculiar neurogenous nature and that they are neither purely connective tissue or nerve tissue.



Mrs. M. R., showing areas of pigmentation and large pedunculated tumor of left thigh.

Numerous different manifestations of the disease have been noted and so classification has been made which in a general way covers most of the cases reported. Class I includes only those cases of plexiform neuromas which are not accompanied by molluscous tumors of the skin with or without cutaneous pigmentations. Class II includes those cases of molluscous tumors of the skin without obvious neurofibromata of the nerve trunks, with or without pigmentations of the skin. Those cases of pigmentations of the skin not as yet accompanied by cutaneous neurofibromata make up class III. Anamalous cases of neurofibromata complicated by the coexistence of bony or epidermic changes make up class IV.

Recklinghausen's disease is not very common as it has been estimated that there will be about one case in every two thousand that report to medical clinics for skin diseases.

The interesting feature of the cases recently reported is the multiplicity and variety of the lesions described and tissues involved. Several cases have been reported with involvement of the upper eyelid. One of the cases reported with involvement of the eyelids also had a hypertrophy of the labia which was due to neurofibromata. Cases have been reported with involvement of almost all parts of the nervous system, among these there was a case with isolated neurofibromata of the sympathetic nervous system with interesting symptoms; many cases have been reported of neurofibromata of the brain, one of these having thirty-one such tumors within the skull; several cases have been reported of neurofibromata of the acoustic and optic nerves. Bones have been invaded by neurofibromata, more particularly the cranial bones. Recklinghausen's disease of the bladder has been reported.

It has been our good fortune to have under observation during the last few years an interesting family afflicted with this condition and the following are their case histories. These patients were first seen at the skin clinic of the Riley Hospital.



Photomicrograph from biopsy study of the large pedunculated tumor on the thigh of Mrs. M. R. The section shows a nerve trunk in which there is a proliferation of fibroblasts and neurolemma cells. The low power study of the same section shows a marked increase of pigment in the basal layer of the epithelium.

Mrs. M. R. a white woman forty-one years of age, came to the clinic during August of 1928 with the complaint that she and her three children had numerous pigmented areas of the skin and that she and the youngest child had tumors of

the skin. When twelve years of age she observed for the first time the appearance of pigmented areas of her skin. These spots were not confined to any particular region. They were of a brownish color, were not painful and the patient thought little of them until several years later when she observed the formation of several small tumors of the skin. One of these tumors which was located in the lumbar region became progressively larger until it became the size of a doubled fist at about the time the patient was twenty years of age. She then became a patient of the Indianapolis City Hospital where the tumor was removed. She was informed at that time that the removed tumor weighed about four pounds. About six months later there was a recurrence of the tumor mass in the lumbar region and finally about two years following the first operation the tumor was again removed and this time it did not reoccur. When twenty-two years of age the patient observed the formation of a tumor on her left thigh which has become progressively larger until it is now the size of a human foot. She states that it is but slightly painful. About five years ago she observed the formation of a small tumor overlying the left inguinal ligament which has increased slowly in size until it is now about the size of an apple. There has been a gradual growth of small soft tumors on each lower eyelid for the last two or three years. The patient stated that she has had no serious illnesses but that she has had a number of miscarriages none of which have been self induced. Previous to 1914 she had nine miscarriages each of which was of a longer period of gestation until she finally had the following pregnancies:

1914. Stillbirth at eight and one-half months.
1915. Living child; full term, seven-pound female who is now living.
1918. Living child; full term, a female who is now eleven years of age.
1919. Living child; full term, a male who died at nine days of unknown cause.
1920. Living child; full term, a female who is now nine years of age.
1921. Stillbirth at eight and one-half months.
1922. Miscarriage at three months.
1924. Stillbirth at eight months.
1926. Stillbirth at eight months.

Occasionally patient is exteremly nervous and has observed for the last five years a slight difficulty in hearing.

Patient was married at eighteen years of age to her present husband who is of good health. He informed us that he has never suffered from any serious illness, operations or injuries. A careful inquiry of the husband failed to show any evidence of pigmentations, tumors or any other familial disease in either of his parents.

Physical examination of the patient shows a small woman about five feet in height, weighing about one hundred and ten pounds. She is forty-one years of age and appears moderately well nourished for her size. Her skin is dark and of a decided bronze color. Her speech and gait are normal.

Her head is of normal shape and size. Her eyes are normal with the exception of xanthoma elasticum on the lower eyelids of both eyes; the pupils react to light and accommodation. The ears, nose and mouth show no pathology.



Photograph of "H", second child of Mrs. M. R., showing areas of pigmentation of the skin over the back.

The heart and lungs are normal. Blood pressure is 122 over seventy. There are numerous areas of pigmentation of the skin over the chest, abdomen and extremities which are of varying size and shape and which are mostly of a walnut color. There are numerous small tumors of the skin and subcutaneous tissue. There is a large pedunculated tumor, soft in consistency and about the size of a human foot on the posterior and lateral aspects of about the junction of the upper and middle thirds of the left thigh. There is a tumor about the size of an apple overlying the left inguinal ligament which is freely movable and which is not pigmented.

Laboratory findings show a negative Wassermann reaction. The blood picture and count is normal except for a slight secondary anemia. Urine repeatedly was normal. The usual blood chemistry examinations gave results within normal limits.

Biopsy study of the large pedunculated tumor of the left thigh shows a mass of young connective tissue with strands and whorls characteristic of neurofibromata. Deep in the section studied was a circumscribed bundle representing a nerve trunk in which there had been a proliferation of fibroblasts and neurolemma cells. The basal layer of the epithelium of the section studied shows an increase in pigment.

Biopsy study of the tumor overlying the left inguinal ligament shows a characteristic lipoma with capsule.

G., age fourteen, is the oldest living child of the patient. At the age of ten it was observed that she had three irregular areas of pigmentation similar to those of her mother but she has no tumors at the present time. She has made unsatisfactory progress in school now being in the sixth grade. She has slight evidence of rickets. She had pneumonia at one year with good recovery, whooping cough at four years with good recovery. She has not started to menstruate.



Photomicrograph of biopsy study from one of the areas of pigmentation on the skin of "H." Section shows a proliferation of fibroblasts and neurolemma cells which we consider an early neurofibroma.

The second child, H, is now eleven years of age. She is in the fifth grade of school. This child has had pertussis, varicella with good recovery. Areas of pigmentation were first observed when H. was eight years of age. She is the most intelligent of the three children.

E. who is nine years of age developed a growth on the upper left eyelid when three years of age which now incorporates most of the eyelid and is associated with a ptosis. There is a marked assymmetry of the face due to a tumor of the left antrum. E. has numerous areas of pigmentation but no other tumors. She is decidedly mentally deficient being only in the first grade. A history of malnutrition during infancy and of varicella and pertussis in the pre-school age was obtained.

Biopsy study of tissue taken from the pigmented areas of all three children are characteristic of early neurofibromata.

These cases are unusual because they show all of the common features of the disease such as the familial tendency, the presence of pigmentations of the skin along with subcutaneous and cutaneous tumors and mild mental deterioration, as well as many unusual features and complications. The following are some of the outstanding features of these cases:

1. A mother having the disease herself has three children who have developed the same condition.
2. Two of the children did not develop the disease until the beginning of puberty.
3. The mother has a very unusual history of many pregnancies.
4. All four cases are short in stature as were the cases of dwarfism reported by Laignel.
5. One case has a tumor of the left upper eyelid as did the cases of Veil and Ferrien.
6. The same case has a tumor of the left maxilla and antrum.
7. One case is below par mentally in a decided way.
8. The mother has recently developed a large lipoma in the left inguinal region.
9. Two of the cases have pigmentations of the skin but as yet have not developed tumors and thus belong to Webers Class III.
10. The majority of the mother's pregnancies terminated prematurely.
11. Those cases of von Recklinghausen's disease having only the pigmented areas may well be called incomplete von Recklinghausen's disease.

The treatment of neurofibromatosis up to the present time has been surgical and expectant; the plan being to remove the tumors whenever they shall cause sufficient pain or mechanical obstruction to interfere seriously with the well-being of the patient.

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CHILDHOOD TUBERCULOSIS*

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Childhood tuberculosis of the pulmonary type is a communicable disease although the contagion is not considered as extensive as that found in most stages of adult tuberculosis. This is due to the fact that the tubercle bacilli are not as frequently discovered in the sputum of the children as that of the adults, which is in turn due to the fact that childhood disease may manifest itself in various non-productive types of lesions. However, even in the childhood types we must consider any active lesions potential areas of contagion. Active lesions of pulmonary tuberculosis are diagnosed as clinical childhood tuberculosis.

Latent childhood tuberculosis is an infection which is a result of a previous clinical childhood tuberculosis. Dependent upon the age of this infection, which represents, so to speak, the stage of healing of the various lesions, determines the potential liability of the infection again to become the disease. It is natural to expect that a focal lesion in the parenchyma, the hilum, or a tracheobronchial gland would be less responsible for disseminating bacilli than would the average diffuse or consolidated parenchymal lesions. Gradations between childhood pulmonary tuberculosis, which manifests itself clinically, and that which is latent or healed, as far as the lesion itself is concerned, are of major importance in the disposition of the respective case.

The symptoms of childhood tuberculosis naturally vary with the type of lesion. Increased temperature, and pulse rate which remains constant, cough, shortness of breath, gastric disturbances, rapid loss of weight, or retardation in weight as a rule accompany the diffuse or consolidated lesions while other types of infiltration often produce no marked symptoms. The age and the resistance of the host and virulency of the organism add or detract to the severity of the symptoms produced. The symptoms of the school age child are often evasive of interpretation if his disease or infection is of that character. That large group of children with latent tuberculosis have no symptoms whatsoever, and the lesions are masked by good health, yet they should be under observation or periodic supervision because of their potential liability. On the other hand one must keep in mind that to be under weight or undernourished is no indication of any particular disease or infection.

These latter groups present to the physician few if any physical signs, although occasionally some of those with a few diffuse active lesions hide behind a chest of normal excursion, resonance and breath sounds. On the whole the extent and character of the lesions determine the physical findings. Neither the stethoscope nor professorial acumen renders aid in detecting latent lesions. Regardless of how one may detest relying upon laboratory aid here is one type of case where the tuberculin test and the x-ray as aids are invaluable.

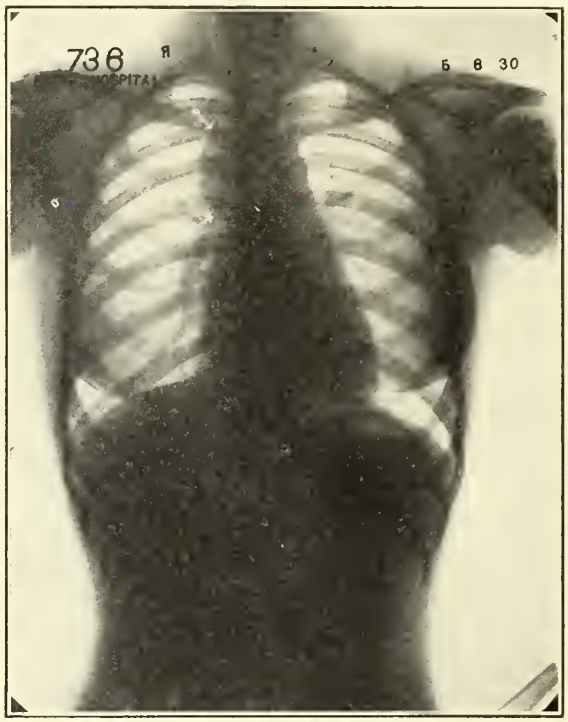


Figure 1 (Case 736). Girl, colored, age fourteen. Circle arrows point to enlarged tracheobronchial gland on right. Two months later small area of infiltration appeared in second I. S. right. Mantoux positive, one milligram T. 99.2, P. 90, sputum negative, no cough. Contact history, negative. Gained 88 pounds to 102 pounds with four-month bed rest. Childhood type of tuberculosis.

In the following group of cases the Mantoux or intradermal test was used in the strength of one-tenth milligram (o. t.). If this test was negative, one milligram (o. t.) was injected. If this proved negative it was later repeated. One case was not given tuberculin because evidence of a very active disease previously was diagnosed. All cases had one posterior-anterior film made, but where this was questionable or showed lack of evidence various oblique positions and stereoscopic films were utilized to rule in or out suspicious lesions. Oftentimes just a flat plate will conceal many significant lesions.

The following eighty cases were examined because they had a cough, had had a cough, or a

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cough had been heard in the family at some time in the past.

The age of the forty colored children ranges from six to fourteen, the majority being under the age of ten years. Of the forty, sixteen were definitely established contact cases, and the sixteen gave a positive Mantoux reaction. Nine reacted to one-tenth milligram (o. t.), while seven did not. The seven not reacting to one-tenth milligram (o. t.) reacted to one milligram (o. t.). Of the sixteen contact cases six were not recordable by x-ray while ten were recordable. Of the twenty-four who gave no definite contact history twelve reacted to one-tenth milligram (o. t.), seven to one milligram (o. t.), and five did not react to tuberculin. Of the thirty-five reacting to tuberculin only twenty-three showed recordable x-ray lesions while twelve did not. Of the five not reacting to tuberculin the same five showed no recordable x-ray lesion. Of the twenty-four non-contact cases nine had no recordable lesions while fifteen were recordable by x-ray. One case, non-contact, and who had non-recordable x-ray lesion, reacted positively to tuberculin, had definite indications of cervical gland involvement. Only three of the entire group showed definite evidence of having an active disease. One had an active parenchymal lesion. Another had an enlarged tracheobronchial gland, and another had hilum involvement and pleurisy with effusion. The case having the active parenchymal lesion in one lung had, at the same time, many calcified nodules in the opposite lung.

In the series of forty white children the ages ranged from six to fourteen years, the majority being under the age of ten years. Of the forty, nineteen were definitely established contact cases. Eighteen gave a positive Mantoux reaction while one did not. Seventeen of the eighteen gave reaction to one-tenth milligram (o. t.), while one gave reaction to one milligram (o. t.). Of the twenty-one who gave no definite contact history, one was not given old tuberculin, ten reacted to one-tenth milligram (o. t.), four reacted to one milligram (o. t.), and six did not react to either test. Of the six that did not react to old tuberculin, one was a contact case and had recordable x-ray lesions. Four were non-contact cases, yet had definite lesions of calcification while one had a non-recordable lesion as far as tuberculosis was concerned. The one not given old tuberculin had a definite case of infiltration superimposed upon old miliary tuberculosis. Of the thirty-one reacting to old tuberculin, twenty-four showed recordable x-ray lesions while seven did not. Of the six not reacting to old tuberculin three had recordable x-ray lesions and three did not. Of the nineteen contact cases, fourteen had recordable lesions, and five non-recordable lesions. Of the twenty-one non-contact cases, fifteen had recordable lesions while six did not. Only four of the entire group showed definite indications of having active disease—one had hilum involvement, and three had parenchymal involvement, two of which were located in the apex.

A total of seventy-nine patients were given old tuberculin. Out of the total, sixty-seven reacted to tuberculin while twelve did not react. Of the sixty-seven reacting to old tuberculin forty-seven showed x-ray findings of the disease or infection.

Of the eighty patients examined eight did not reveal any indications of having had tuberculosis infection, while seventy-two demonstrated some indications of having been infected. Moreover, of the seventy-two only seven had indications of comparatively active disease while sixty-five had a latent infection.

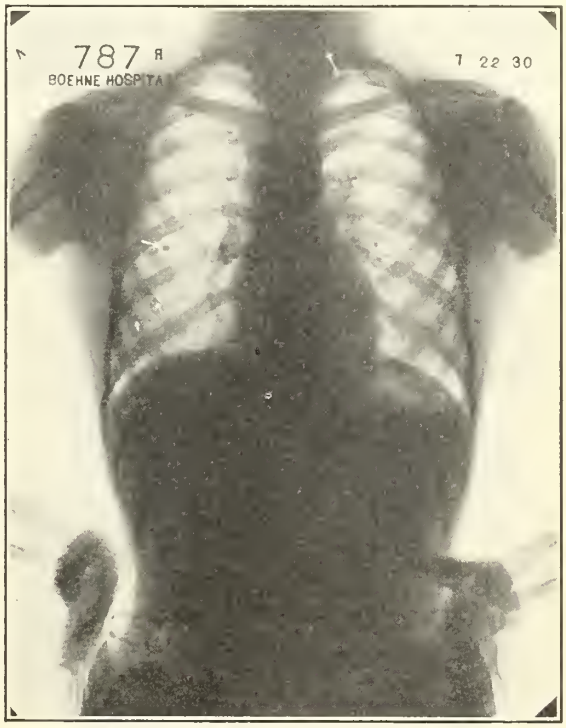


Figure 11 (Case 787). Girl, age twelve. Right: Straight arrows point to several parenchymal lesions which are calcified. Circle arrow points to associated lymph node calcifications. Left: Cross arrow points to parenchymal lesion calcified in the apex. Paravertebral trunks are thickened and extend to the cross arrow from hilum. In the hilum, circle arrow points to calcified lymph node. All lesions healed. T. 98-99, P. 76-90. Mantoux positive, one milligram. Sputum negative, no cough. Contact history—father died six years ago, mother died two months ago. Calcification denotes patient was infected by father. Apical lesion denotes adult type, other lesions childhood type of tuberculosis.

In interpreting the clinical and laboratory indications combined one would judge that the majority of the patients had had an infection at least before the age of ten years, if not the age of six. At one time in the stage of infection this entire group probably should have had hospital or sanitarium treatment or its equivalent for a period of time. The question arises as to what disposition should be made of the sixty-five cases with latent infection. Special study of each case would divide them into those that might need care in the preventorium, the health camp, the open window room school, or instruction and supervision in the home. In this group of cases there would be few that

could not continue or arrive at good health in the proper home surroundings. Since each child ultimately would be at home, the most practical disposition would seem to concentrate the public health drive into that home unable to provide a healthy environment. If necessary remove the patient in question for the time being until the home situation is adjusted.

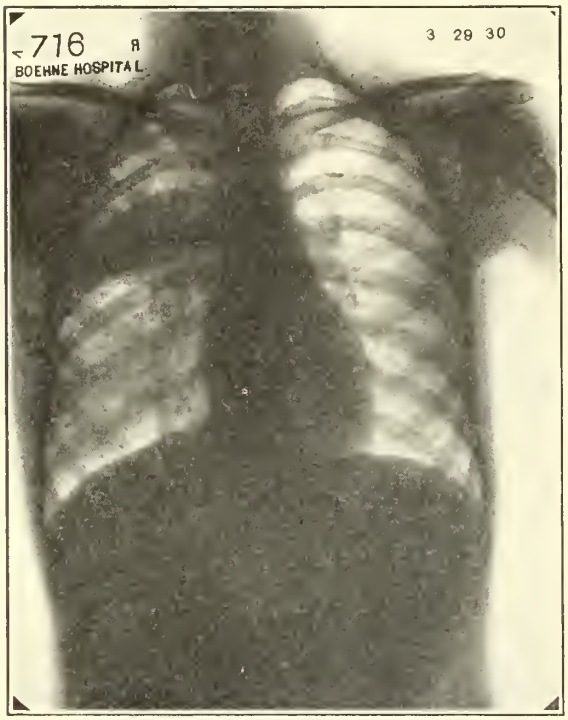


Figure III (Case 716). Girl, age fourteen. Right: Arrows point to extensive infiltration in upper lobe and apex of lower lobe. Slight infiltration along lower trunk in lower lobe (in which later films showed extension). Diaphragm tented by adhesions. Left: Small node in sixth I. S. Rales anterior and posterior upper lobe. Mantoux not given. Contact case—father refused to be hospitalized. Sputum positive. Cough moderate. T. 99-102, P. 80-120. Pneumothorax instituted three months later. Gained from 98 to 114 pounds four months after pneumothorax. T.P.R. normal at present. Adult type of pulmonary tuberculosis.

To send patients to a preventorium, pre-tuberculous health camp, or an open window schoolroom without a technical check-up by the tuberculin test and a special roentgenologic examination is a waste of time, energy, and money. The tuberculosis problem must be attacked on a scientific basis rather than on a general appearance basis which is apt to be only idealistic. Opie[1] says: "The aim of preventoriums and open-air schools vary considerably and are not as yet accurately focused on the medical problems with which they are essentially concerned. It is often stated without specific definition that they admit 'pretuberculous children.' They are maintained for children in 'substandard health.' For it is vaguely assumed that any improvement in the health of children will prevent tuberculosis. Knowledge of grave latent tuberculosis of apparently healthy children accumulated during the last few years defines accurately a large part of the children who need prophylactic care to protect them from tuberculosis. It has shown that the discovery of these children is dependent on available technical procedures, and that preventive treatment must be guided by these procedures if it is to be effective."

If a child does have a latent infection, because he should have periodic supervision or observation is no reason why the parents should be alarmed unduly. The fact that they have been informed of necessity of supervision up to the age of twenty is in itself a protection of health. To the contrary, if the child presents neither a reaction to tuberculin nor x-ray evidence, I maintain that the same supervision of that child up to twenty years is necessary if we expect to combat tuberculosis effectively. No one knows when or where that child will come in contact with tubercle bacilli.

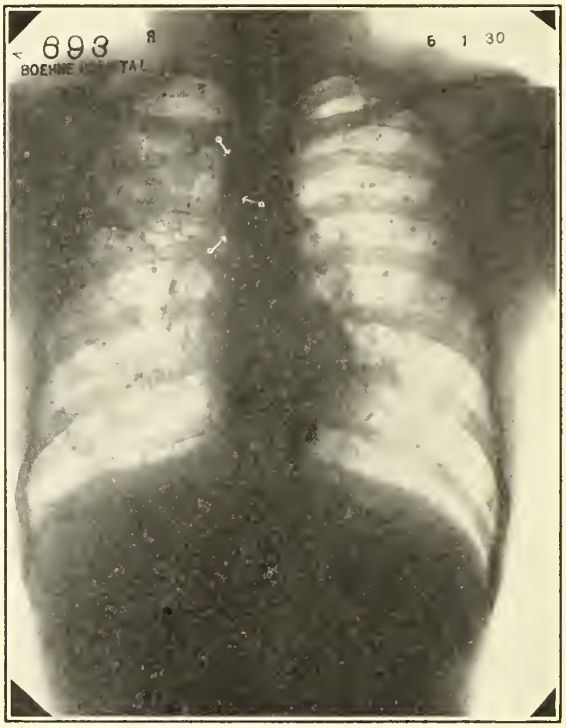


Figure IV (Case 693). Boy, age fourteen. Right: A few hundred isolated areas of calcification disseminated throughout. Straight arrows point to a ring of diffuse infiltration where older areas of calcification broke down. Denotes an active lesion. Circle arrows point to tracheobronchial gland crenated as result of calcification. Left: A few hundred area of infiltration disseminated throughout with calcified lymph node in hilum. Mantoux not given. Rales throughout right upper lobe.

No contact. Had pneumonia at age of two, which undoubtedly was miliary tuberculosis. T. 98-100, P. 90-120. Sputum positive, cough moderate. Healed miliary pulmonary tuberculosis on which is superimposed an active pulmonary tuberculosis, adult type.

Childhood tuberculosis diagnosed as a preventive health measure will not become thoroughly instigated until the parent realizes that it is not a disgrace to have such a diagnosis. The tendency to relieve the family tree of any responsibility should not be considered a stigma. This should be viewed as an aid to diagnosis in establishing a known contact case. To fear the disease or an examination for the same obviously fosters ultimate dissemination of tuberculosis. It defeats the purpose of heavily financed public health pro-

grams. Until people replace fear with caution and with a knowledge of the intelligent methods in preventing contagion, and with a knowledge of the correct supervision if they have become infected we cannot expect all their children to go through life without infection or perhaps disease.

It is evident that conclusions as to the entire city of Evansville cannot be summarized on eighty cases, since different statistics would be obtained from different sections of the city. The sectional incidence of infection or disease would vary just as in rural and urban communities. However, sufficient data are presented to outline the probable correct approach in the study and in the operation of sequential public health measures. It is definitely essential that all such measures, the disposition and supervision of cases should be performed and interpreted in the light of the scientific laboratory procedures.

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TUMORS OF THE COLON*

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This is a very common medical subject, but a most interesting one. Volumes have been written on it and will continue to be; in all probability as long as man is interested in the healing art and its associated subjects. No matter how thoroughly the physician of hundreds of years in the future may know the subject from personal experience and review of the teaching of the past, it still will be an interesting discussion, if only because of the human and individual peculiarities in each case.

My experience with tumors of the colon is indeed very limited compared with those in large clinics, yet it has interested me much, and I offer a discussion based upon forty-one cases operated by myself and associate, the late Dr. C. C. Terry, in the past twelve years, also from the accumulated impressions we get from other physicians and from quite a number of patients upon whom no sort of operative procedure was undertaken.

The number of cases cured is indeed small, and the mortality rate very high in this series. The operation upon these cases is a serious undertaking, beset with many dangers; however, it is one we cannot sidestep or refuse to face. The benefits more often obtained cause the surgeon to continue on in his endeavor to relieve and, at times, to cure. In so small a number of cases there is abundant food for thought. One must consider that most of the cases were old or very ill from prolonged infection or bowel disturbance. Many from frank obstruction or near enough to complete obstruction to constitute almost an emergency situation, in spite of age and poor operative risk, can obtain some sort of relief from surgery. The old cry of early recognition comes from all attending men as of old. One often asks himself, "Is there no way that one can detect these tumors early and operate early?" A plea that should ring in our ears each time a suspected case is before us.

The kinds of tumors most common in the colon, in order of their frequency, are carcinoma, adenomata (commonly called polypi), sarcoma, tubercular and rarely gonorrheal. By far the greatest number are carcinoma. Thirty-five cases out of this list were carcinoma of one form or another. They were distributed as follows: rectal, 5, sigmoid 13, descending colon 4, transverse colon 6, ascending colon 3, cecum 4. There were twenty-two at and beyond the splenic flexure and thirteen proximal to it. It is quite a common occurrence to find fifty per cent or better of the carcinomatas of the colon in the distal portion of the gut, including and beyond the splenic flexure. In this group sixty-two per cent. In the rectum was one polypus undergoing malignant changes, and a gonorrheal tumor, if one might call it such, involving the mucous membrane, the submucous coat and muscularis, causing the wall to be thickened about one-half inch and extending up into the sigmoid. There were two other adenomata, one of the transverse colon causing an intussusception, and one in the terminal ilium close to the ileocecal valve and extending through this into the cecum, gradually enlarging to the size of one's fist until it had produced an obstruction at the ileocecal valve. There was one sarcoma in the cecal region, which was quite large and at postmortem proved to be a sarcoma of the cecum.

Symptoms and Diagnosis. The text book symptoms are mostly of advanced cases and do not clearly present the picture of cases in the early stages of the disease when it is most easily removed by surgery. I have not a new set of symptoms or methods of examination to offer that will make these cases easy to diagnose; in fact, they are among the most disturbing sort of cases we have to decide upon or to come to a proximal definite conclusion until it is quite late, when obstruction or other marked symptoms identify it.

In a few of these cases the first symptom that was noticed by the patient and caused him to consult the physician was that of obstruction of definite nature. Such a condition precludes the possibility of treating the disease earlier, and will continue to do so unless the future brings forward a new method of diagnosis and a method that will bring the patient to his physician earlier. However, a number of them had telltale attacks of pain in the lower abdomen, associated with frequency of bowel movement (often a symptom of constipation) sometimes associated with blood in the stool, followed by a recovery from these symptoms for a varying length of time, even months, the patient then congratulating himself on his escape from any severe illness and a complete

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recovery. It is at this time that a careful and painstaking examination over a sufficient period would often give the best service. He often finds later that he has an increasing difficulty in getting the bowels to move, and a lack of energy and endurance not previously experienced. From this time on he gradually goes on until the symptoms cannot be laid at the door of an increasing constipation. He gradually but slowly loses his energy and strength, has frequent and small stools, often of a tarry character, and goes on into a chronic debility. It is most often at this late stage that the surgeon is called upon to perform magic.

The most useful methods of examination, more or less in their order of importance, are: a good history of the case, with a careful, repeated physical examination with several points well in mind. Palpation of the abdomen for a tumor which if present may be detected only after several attempts. Two of this series had numerous examinations of the abdomen without detecting a tumor, when one day while examining the patient in the hospital the tumor was felt quite distinctly in each case in the descending colon. The attention of another attending man was called to the presence of a palpable tumor and the next day neither one of us could palpate it. Gas accumulations, the position of the gut, and the position of the patient while being examined has much to do with the palpability of these masses. It is not safe to say there is no palpable tumor in the abdomen in these cases unless repeated attempts are made from day to day. The abdominal wall should be watched for any peristaltic waves or the presence of fluid in the flanks, although fluid is not common.

Bimanual examination of the rectum for masses, either in the rectum or lower abdomen, may be rewarded. The culdesac is often a lodging place for metastatic masses of the intestines. In carcinoma of the rectum it exceeds in value the examination by the proctoscope.

Palpation of the axillae, inguinal region, the liver border, the abdomen and especially the left posterior triangle of the neck for telltale enlarged lymphatic glands is essential.

The sigmoidoscope often is very useful and should be used properly and in competent hands. It may reveal a growth that will be of great help. Always it should be entered by direct vision and by one who is accustomed and careful in its use. Much has been said about the universal and frequent use of this instrument. I could not recommend its use as freely as one uses a nasal speculum or tongue depressor. It is a dangerous instrument when improperly used. There are many cases of puncturing the sigmoid, even by men who have used it much. When it is possible to obtain a small piece of tissue of the tumor by the use of the sigmoidoscope for microscopic study it is highly advisable.

It is very difficult to make a thorough study of this type of case at one's office. If those presenting early symptoms would go to a hospital for three or four days, where daily examinations could be made, and when frequent laboratory findings, especially of the stool, could be obtained, it would be of great benefit in arriving at a satisfactory opinion of the case. Too often the hospital is too full for such cases, or the patient has not the knowledge that convinces him of the benefit that is derived by this method.

The stool examination should be of routine character and especial attention to the presence of blood. In these cases blood shows in the stool with remarkable regularity, although two of the series showed no occult blood after several tests.

The blood count is not greatly different than one might expect in advanced cases of illness where loss of weight and low grade of infection are present. In nineteen cases the hemoglobin averaged seventy-one per cent. In a few cases the hemoglobin was surprisingly high. The white count averaged above normal slightly. The blood study is not of marked significance as a direct factor in determining tumor of the colon.

A diagnostic symptom of considerable value in ascertaining, in a general way only, the position of obstruction, is the location of the pain as related to the upper or lower abdomen. If the pain is above the level of the umbilicus the intestinal block is in the small gut. If below this level it is in the colon. This was constant in all cases where the location of the pain was mentioned in the history.

X-ray of the colon for tumors is of little value in the average operator's hands. It has been of the least use of any of the diagnostic x-ray aids. Especially is this true in the early cases, and in some of the late cases as well, although I hope to show you a few slides where it gave a definite guide as to the location and cause of the trouble. These cases were all late ones where a diagnosis could be arrived at quite as well without its aid. I realize that many will disagree with this statement, yet two of the advanced cases in this series were examined by ingested barium meals and by barium enemas, one by three different x-ray operators and one by two, and in neither case did they detect a carcinoma of the transverse colon. One case died within two weeks after examination, and the diagnosis was made by postmortem, and the other diagnosis was made by other means and substantiated by abdominal section. I do not discourage this measure of examination. It is always done, but the negative report should not be taken too seriously. Too often a negative x-ray report of colon tumors leads the physician into a false sense of security. He assures the patient that he has no tumor of the colon, only leading the case into a dangerous delay.

The barium enema has been more useful in making a diagnosis than the ingested meal. So far as my experience goes barium by mouth is not contraindicated in cases of intestinal obstruction. Although in those where the obstruction is low

down in the rectum or sigmoid an exception might exist, the barium often causing pain and discomfort and cannot be easily expelled. Therefore, obstruction of the rectum may constitute a contraindication for the barium meal.

Conditions Affecting Surgical Interference. We come face to face with the problem of when to operate and when not to operate. G. Grey Turner once said "unless there is some unequivocal evidence of distant dissemination, the patient deserves the chance which operation alone offers."

When important organs, some distant from the primary growth, are suspected of being involved, such as often may be found in the liver, or lymphatic glands are detected in the neck, Douglas' pouch or elsewhere that are distinctly of the consistency of metastatic nodules, operation would be of the makeshift variety only. Fluid in the abdomen is considered of serious omen and a bar to successful surgical intervention. The size or mobility of the tumor, even if involving adjacent organs, has not always barred successful removal by some operators. Adhesions, although adding to the difficulty of operation, have not barred the attempt that has led to a successful termination. Strong mesenteric adhesions are graver than adhesions to the peritoneum of the abdominal wall, where excision of a portion of the wall is attended with less danger to life and to metastatic extension by continuity. Two of the Mikulicz operations of the sigmoid were large tumors with adhesions to the peritoneum on the abdominal wall and did well from excision and are living, one five and one-half years and the other two years, with no signs of recurrence.

In the fatal case of cancer of the sigmoid and the multiple stage operation was done, when the crushing Mikulicz forceps were applied in the second stage a leak was detected near the end of the forceps. The fault was probably due to the lack of proper mobilization of the proximal and distal portion of the gut near the tumor, thus causing too much tension on them by the point of the forceps, thus causing necrosis at this point. Mobility of the tumor was not in all probability the cause of this difficulty.

Carcinoma of the colon has for years been considered a chronic disease. It is as a rule a very slow growing tumor. Only a few arise rapidly and quickly terminate the life of the patient. They metastasize slowly. They remain a local condition oftentimes after severe symptoms are present. A few cases do not present themselves for treatment until metastasis in the lymph glands or liver are recognized when the examination is made. This is not the most common mode of growth of these tumors. In all probability the presentation of early metastasis, so said to be, are none other than the usual late ones, with a preexisting colon carcinoma that did not produce marked local symptoms or ones of which the patient became apprehensive enough to consult his physician. In a number of cases the patient does not present himself for examination until symptoms of obstruction are present. These may be mild or severe. Often they are of very mild demeanor, only causing cramps in the lower abdomen for a few hours, often without nausea or fever, and leave with no others that are noticed by the patient for months. Carcinoma of the colon has compared favorably in chronicity with epithelioma of the skin. This is a most important condition when considered from the diagnostic and treatment point of view.

One great teacher once said that the surgeon should best consider it a local disease unless it can be proven to be otherwise. It would give a chance to the unfortunate patient to have a real service administered where there it not the slightest hope otherwise.

Not infrequently the first symptoms are that of obstruction, with occult blood in the stool which lasts only a few hours and subsides without any further symptoms for months, as I stated previously. After a careful and extended examination, preferably in a hospital, and all other findings are in harmony, an exploratory laparotomy may be considered advisable. No doubt if this method of procedure were followed many patients would be saved that would be lost if more pronounced symptoms were awaited in order to make a diagnosis.

The mesenteric glands are often enlarged near the tumor. These may be metastatic or from lymphangitis produced by infection in the ulcerated tumor mass. Authentic cases are recorded where all of the enlarged glands could not be removed and the patient lived beyond five years without a recurrence. This tends to prove that the glands were enlarged by infection and not carcinoma. Glands should be resected if in line of lymphatic drainage, great care being taken to cover the glandular field drained by the lymphatics of the proximal diseased area. Enlarged mesenteric glands near the disease are not always, or one might say seldom is, a contraindication for resection, although they add much to the gravity of operative procedure.

One often wonders what becomes of the cases which have passed through his hands where tumor is diagnosed or where symptoms and findings not of decisive enough character for a diagnosis of tumor to be made but that strongly suggest one. They leave his care and go elsewhere, oftentimes from physician to physician until they pass out of the picture as a case that can be relieved by surgery or where only relief for a short time can be given by one of many makeshift operations, such as we have all had to recommend to relieve distressing symptoms, but which have no promise of cure; oftentimes a very temporary relief. It has been questioned whether makeshift operations prolong the lives of these unfortunate people unless they are done to relieve actual obstruction. The tumor growth goes merrily on to a fatal termination. Authorities question the

inhibiting effect upon a cancerous growth in temporary operations such as short circuiting anastomosis. In those cases where exploratory laparotomies were done and anastomosis was done to turn the intestinal current around the diseased portion, the cancerous growth is not hindered or decreased but in many cases is actually stimulated to more rapid proliferation.

This is not an argument against attempts to relieve acute emergency conditions such as obstruction, but is directed in general to the effect upon such growths and the advisability of the operation when an emergency does not exist.

Three of this series were adenomata, one in the transverse colon associated with intussusception, one in the terminal ilium extending through the ileocecal valve into the cecum, and the third in the rectum. None of these had undergone malignant changes, nor did the previous history of the case give us any hint of a previous disturbance, except in the two high in the colon there were previous symptoms of increasing constipation. The one in the rectum later in the disease produced a sense of weight in that region, with attacks of hemorrhage increasing in intensity.

Prognosis. In the comparatively few cases I am reporting one cannot draw conclusion as to prognosis that compare with the broad experiences obtained in large institutions, yet these have a marked lesson to teach. The mortality is indeed high, but no effort has been made to camouflage it and to the best of my ability it is correct. We have had a rather insufficient follow-up system at our disposal. Many of the cases may have lived or maybe are still living that cannot be accounted for. Again, many may have died before now, and I do not know it on the same account. Those spoken of have been traced and accounted for as shown in the chart of operations and records.

The cases as a rule are usually advanced and poor operative risks when they come to surgery. Many are old, others septic, some very anemic and bled out, some were acute obstruction cases and others almost cachectic, yet this is the grist from which the surgeon often has to choose the material for his service. Would it not be wise, if it is at all possible, to choose the material early in the disease?

Choice of Operation. Of the cases in this report there were seven Mikulicz operations done in two stages by the usual technique, with which we are all more or less familiar. This method was used when the mesenteric glands were not enlarged to any marked degree and when the tumor was in a freely movable part of the colon, such as the sigmoid or descending colon. It frequently cannot be used where the abdominal fat is too thick to permit the tumor to be delivered through the wound without undue traction on the gut. Like other two stage operations on the colon, it is much the best procedure to follow and carries a lower mortality rate.

Of the seven cases operated by this method, six lived from 6 months to 5½ years following the operation. One died of peritonitis 4 days after operation. Three of the six cases are still living and present no indication of recurrence of the disease, one 1½, one 2, and one 5½ years. The other three have died, one metastatis carcinoma, one pneumonia, another apoplexy. This gives an operative mortality rate of fifteen per cent and is by far a lower rate than the average.

Of the fourteen lateral anastomosis four were of the makeshift type, such as anastomosis about obstructive tumors, and the other ten were associated with resections and lateral anastomosis. Eight of these survived the operation from three months to seven and one-half years. In these are included one for adenoma of the transverse colon with intussusception, where two-thirds of the transverse colon was resected with anastomosis of the ilium to the remaining portion. This patient is alive eight months after operation. The other was a case of hyperplastic tuberculosis of the ascending colon with resection of ascending colon, one-third transverse and about eight inches of ilium, with anastomosis of the ilium to the remaining portion of the transverse colon. This patient lived 7½ years in good health except the last eight months of this period when he contracted pulmonary tuberculosis and died.

One of the cases in this series cannot be traced but a short time after leaving the hospital. At that time he was in fairly good condition. Five cases died in the hospital, one of hemorrhage, one shock and three from peritonitis. This gives an operative mortality rate of thirty-six per cent plus.

The end to end anastomosis—there were four operations, three died before leaving the hospital, and one lived 2½ years following operation. This gives a seventy-five per cent mortality.

One of the fatal cases had a large adenoma of the ilium near the ileocecal valve. The tumor extended through the ileocecal valve into the cecum reaching the size of one's fist and producing obstruction of the bowel. This patient was a bad operative risk and died from shock. Another was a cancer of ascending colon who died of peritonitis. Another was a cancer of splenic flexure with resection of the tumor. She died in the hospital, of peritonitis.

There were four operations for cancer of the rectum, one Kraske, three Coffy, all of which lived from three months to three years. Of these one died of metastatic carcinoma 1½ years after operation; one has local recurrence 8 months after operation, and the other two are living and free from recurrence at one and three years, respectively.

The other eleven of the series are colostomies or other type of makeshift operation to overcome certain important symptoms such as obstruction, hemorrhage, tenesmus, infection, or to establish drainage. These cases were all conducted without operative death and without particular surgical

significance, and with only temporary results lasting from a few months to not over two years.

I have listed these operations under certain heads denoting the general plan of the operation, and it looks as though a certain type of surgical procedure was much to be desired over others. End to end anastomosis would seem to present the most difficulty. This statement is open to question. The cases operated by this method in this series were not good risks for any method of operation. I have been schooled to use the lateral anastomosis as a general rule, although I saw a case where the sutures in the anastomosis were put to such a tension that necrosis and a leak was established. In this same case the end of the gut lacked the proper circulation and the gut died, causing a fatal peritonitis.

The end to end anastomosis often gives less tension. It is important in either type to see first that the circulation in the ends is perfect. This is often difficult when crushing clamps are used when resecting the bowel. Other clamps do quite as well and I think better. It gives a much better chance to observe the condition of the circulation at the end of the resected gut. Infections come more often from lack of care in preserving good circulation than from leaky suture line or spilled intestinal content upon the field of operation, which is in no wise common. No particular line of procedure is well carried out when planned too minutely before the opening of the abdomen. It is at that time that experience should tell us what plan to follow.

Fat abdomens often present a most menacing aspect. The fat often causes faulty apposition at the anastomosis. It is wise to remove fat about the field so that a perfectly clear union may be made.

The anastomosis should be water tight, with great care not to constrict the circulation leading to the suture line. A second line of sutures is essential with the help over this of epiploic tissue that can be had in the vicinity.

Preliminary colostomy or cecostomy has many advantages and only a few disadvantages. It gives a chance to explore the abdomen, to note the size of the tumor, its consistency and mobility. It gives a chance to detect metastatic growths if any present themselves near the peritoneal surface or upon it. It rests an infected colon and offers a chance to irrigate it through and through. It gives the patient a chance to eat and gain in health. Dilated colons may regain tone by a cecostomy if obstruction or partial obstruction beyond the cecum is present. It is not of value when the growth is in the cecum or too near it. It is more difficult when a cecostomy is present to obtain a sterile field in secondary operations, yet this has not often caused trouble. I much prefer this method of attack in carcinoma of the colon when it is applicable. Many times a cecostomy is all that can be done. In all of my cases other surgery was not considered advisable, although two of these cases are now in the treatment and rest period, where we hope later to do further surgery to eradicate the tumor itself.

I regret the great operative mortality rate in carcinoma of the colon as we see the general run of cases. It becomes a burning subject as patients present themselves with indefinite obstructive symptoms of the bowels and only a few other findings to be had, with such a small degree of assistance and cooperation on the part of patients when so afflicted, which in all probability is due to two factors, one is the difficulty in making an early diagnosis, and the other is the lack of teaching the general public has in the advantages to be obtained in the early diagnosis and treatment of carcinomata of the colon. It is a treatment that would present even more fertile results in the relief of these unfortunate people than the early diagnosis of carcinoma of the breast, which has been so broadly taught that we have a goodly number of women who consult their doctor on the slightest symptom or sign of disease in the breast, and today cooperate much more willingly in the early surgical removal of tumors of the breast than they did in the past, all because the physician has taught them the importance of early diagnosis and treatment.

The colon carcinoma does not metastasize as early, grow as fast, is amenable to treatment early in the disease, has a high operative mortality late in the disease, and usually presents some symptoms early enough to be recognized if carefully examined in a hospital, even when signs of obstructive pains are present that are not quite definite but have occult blood in the stool and other symptoms that the surgeon felt would be best cleared up by exploratory laparotomy. If such propaganda was pressed, taught and explained to the general public, with ardor and tenacity, much good would be accomplished in the end by obtaining better cooperation, earlier diagnosis and better treatment.

Discussion

W. D. Gatch, M.D. (Indianapolis): Cancer of the colon is an important subject for two reasons. In the first place, it is common; in the second place, as the essayist remarked, probably in a larger percentage of cases than cancer in other internal portions of the body is a lasting cure possible.

The essayist has emphasized the point that we must get these cases early. That is true of all cases of cancer. However, when you try to apply this principle you meet with unexpected discouragement. You doubt whether you are going to get these cases much earlier. You all know that Balfour made an interesting study in this regard. He compared the histories of one hundred physicians who came to the Mayo Clinic with cancer of the stomach, with the histories of one hundred laymen who came to the Clinic with cancer of the stomach, and he found there was no difference in the time

when they came. Still I think something useful can be done in educating the laity. Just as in cancer of the breast we have taught the laity that a lump should be investigated at once, that in cancer of the uterus prolonged and daily bleeding calls for immediate investigation, so we must seek something equally evident that the doctor and the laity can apply to disease of the colon.

What is one thing of diagnostic value in cancer of the colon? Probably this: a change in the patient's bowel habit. He may have had no constipation during the preceding part of his life; then he begins to notice that something is wrong; either the bowels are a little loose, or, more usual, that there is increasing difficulty in having a bowel movement; he has to take heavier and heavier doses of cathartic. When a patient comes to you with a story of increasing difficulty in securing bowel movement, you should suspect cancer of the colon and subject him to immediate examination.

Dr. Baker has emphasized the fallacy of x-ray examination in these cases, and I quite agree with him. The chances of error will be greatly reduced if instead of giving the meal by mouth a barium enema is given. I believe a good x-ray man by the use of barium enemata can diagnose the majority of these cases, or at least come close enough to the diagnosis to advise exploratory operation. I believe our chance of getting these cases early will depend on two things: change in the bowel habit, and the use of the barium enema in x-ray examination in addition to examination by the finger and the proctoscope.

As to improving the operative results, Dr. Baker's statistics are not as bad as he thinks they are. He has listed cases which were obviously hopeless before he started on them. Cases of that kind should not be included in operative mortality. If he omits these cases from his record it would be above the average of what is achieved the country over. We must admit that the death rate is higher than we like to contemplate. If a case comes in with metastasis, you should not include it in your report of cases treated.

A word as to the management of these patients. I have of late become converted to the use of radium in selected cases of cancer low down in the bowel. The case which converted me was one I saw in consultation with Dr. Graessle who is present today. When we saw this patient he had a totally inoperable case of cancer above the sphincter. He did not have complete obstruction. We considered a palliative colostomy, but decided we ought to postpone this as long as possible and referred him for radium treatments. Suffice it to say that I examined that patient in my office last week, and I would defy any of you to discover that the man ever had a cancer. He is perfectly well after three years. On the other hand, I have had many patients who did not receive the slightest benefit from radium. I have one case in which the cancer has apparently been burned out completely, but the woman was left with a terrible stricture from an x-ray burn at the rectum, and I had to reset the entire rectum for relief of intolerable pain.

In regard to growths higher up, there are some things that I have found very valuable. We should divide these cases into two groups: those that have obstruction, and those who do not. The majority of my cases, unfortunately, have come to treatment with obstruction. The presence of obstruction does not have any important bearing on prognosis because it does not have much to do with the metastasizing of the growth. The growth that has produced total obstruction has just as little chance to metastasize as one that has not. In the case with total obstruction it is my plan to do, under local anæsthesia, a colostomy. Then I take a week or two to clean out the bowel thoroughly, because I believe if there is one important thing in colon surgery it is that an anastomosis should not be done in the presence of obstruction. Having done the colostomy, and having by irrigation and other means thoroughly and completely evacuated the bowel, I proceed to do an anastomosis. I have a form of anastomosis which I worked out experimentally a few years ago that I find highly satisfactory. I think we should never use catgut in anastomosing the bowel. A catgut suture makes a terrific hole in the bowel. is extremely well tolerated by the bowel, and with this aseptic type of anastomosis of the bowel which is perfectly empty the results are tolerably good so far as the immediate mortality is concerned. My chief difficulty in operating for cancer of the colon is not in anastomosing, but in getting the growth free. If I get the growth free I do not have to worry about the anastomosis.

Within the last year I have resected the cecum and ascending colon of two patients, doing an anastomosis between the terminal ileum and the transverse colon. They both came through without any sign of infection. If the technique is good enough to do away with wound infection it is good enough for all practical purposes. It is usually possible by cutting the peritoneum along the external border of the bowel to pull the ends together so that a lateral anastomosis without tension is possible. The great difficulty is the one Dr. Baker has mentioned—the handling of the fat bowel. I do not like the Mikulicz operation. My experience with it has not been happy.

I enjoyed Dr. Baker's paper very much and agree with him in practically all he said.

THE RADIOGRAPHIC FACTOR IN THE EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS*

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Roentgenology is a highly developed department of clinical medicine and in the fight against pulmonary disease has, against great odds, taken its place in the front rank. If the practicing physician has not taken advantage of this fact it is because the x-ray proponents have been derelict in their duty or are too modest to emphasize facts proven by research in the living and at the autopsy table. The difficulty in x-ray diagnosis is not in the typical, clean-cut, advanced cases but in the borderline, early or atypical and complicated ones. Here errors in roentgen interpretation can be overcome only by sufficient experience and training. From the older conceptions that x-ray study would show only well-developed stages of pathology, we are rapidly developing methods of detecting tissue changes which would otherwise remain unsuspected. We are showing the pathology before disease is clinically apparent.

A good quality of photographic work is essential to correct interpretation. Unfortunately, interpretations are made from many poor films which should have been destroyed. Also, definite conclusions are being drawn from fluoroscopic study alone. Thickened trunk markings are incorrectly diagnosed as tuberculosis. This is quackery of the gravest sort and the public should be so informed.

A few reasons for the failure to find tuberculosis before it is advanced may be listed:

1. The patient has no symptoms of pulmonary disease and does not get an annual physical examination.

2. If the patient has symptoms and goes to the doctor, the physical and clinical findings are so indefinite that a diagnosis cannot be made at one examination and the study is not continued.

3. X-ray examinations are not made.

Authoritative opinions taken from current literature on the value of x-ray in the early diagnosis are as follows:

Breuer:[1] "An incipient case of tuberculosis cannot be diagnosed by means of percussion and auscultation; when it can be it is moderately advanced. The roentgenogram is second in importance only to a complete history, and should take precedence over physical findings in early cases."

Webb:[2] "The roentgenogram is the only method available for detecting early pulmonary tuberculosis."

Chadwick:[3] "A roentgenogram is indispensable in the examination of the child's chest. Without it a positive diagnosis of the childhood type of tuberculosis cannot be made."

Opie:[4] "For the diagnosis of tuberculosis before there are significant symptoms or physical signs, two methods are available: the tuberculin test and the roentgenological examination. Without the latter, recognition of the grave tuberculosis that has not affected general health is usually not possible, either in children or adults."

Minor:[5] "Auscultation is our most accurate means of diagnosis, despite those who would place the roentgen ray first. The physician should be able to diagnose most cases without the aid of the x-ray, though no man who specializes in tuberculosis could dispense with it, but it must be taken by an expert and interpreted by him."

In emphasizing the roentgen study for the detection of the earliest lesions of pulmonary tuberculosis, the history, physical examination and laboratory study should not be neglected. The film shows the pathology and the extent of involvement; the fluoroscopy, altered respiratory function. The patient's reaction to the pathology can only be ascertained by the other three methods.

In diagnosis the examination of the patient may schematically be divided into four parts, as follows:

1. History:
   Family.
   Past illness.
   History of present illness, etc.
2. Physical examination—complete.
3. Radiographic examination—fluoroscopic and film study.
4. Laboratory:
   Sputum analysis, tuberculin tests, bacterial cultures, complement fixation, blood counts and sedimentation and guinea pig inoculation.

Fluoroscopic study should be a part of every x-ray examination of the chest; its chief value is in observing (1) the mobility of the bony thorax and diaphragm, (2) the mediastinum, (3) the relation of massive pathology to the mediastinal viscera and (4) cardiac muscle tone. An early tuberculous lesion cannot be diagnosed by this method.

A single chest film is better than none at all; fairly accurate information can be obtained. It is far better than trying to make a diagnosis with the fluoroscope, but not so convincing as the stereoscopic films.

Stereoscopic films, if correctly made, permit visualization of the thoracic cavity in three dimensions and afford a means of visual study of lung and pleural pathology before death. Localization by lobes, and within the lobe, is made possible.

Oblique and lateral views are of value in demonstrating pathology in the mediastinum, or superimposed by the heart or other dense shadows.

The injection of an opaque solution into the bronchial tree, with fluoroscopic and film study, is at times needed in making a differential diagnosis.

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X-ray interpretation is of diagnostic value in direct ratio to the extent of the roentgenologist's knowledge of the normal roentgen chest appearance, plus a basic training in the roentgen appearance of lung pathology. Clinical skill is of no advantage in film reading.

The committee of the National Tuberculous Association, in establishing a standard for adult normal chest films, include: (1) calcification in the hilum, where no other pulmonary changes are seen, (2) heavy trunk markings, if without fan shadows under the pleura or pleural thickening, (3) tracheal deviation without lung, pleural, mediastinal or spinal pathology and (4) costophrenic or slight interlobar pleural thickening, if no other definitely abnormal findings were noted.

For purposes of x-ray study a simple classification of tuberculous changes is desirable:

1. Childhood type:
   (a) Glandular enlargement, with or without parenchymal lesions.
   (b) Tuberculous caseous broncho or lobar pneumonia.
2. Adult type:
   (a) Apical fibroid tuberculosis.
   (b) Caseous broncho and lobar pneumonia with apical lesions.
   (c) Fibrous pleurisy or pleural effusion.
   (d) Miliary tuberculosis.

In childhood the primary tuberculous infections in the lung will not produce changes which show on x-ray films unless it is a pneumonia. The small sensitizing infection heals, with absorption of the exudate. The glandular enlargement is secondary to this infection and may or may not produce symptoms. If the glandular enlargement is associated with apical lesions the prognosis is not so good. Calcification in the hila is the result of a healing process, and in children is believed to be due to tuberculosis which may be either active or latent.

In adults the most common form is the cone-shaped infiltration in the upper lobes; the tubercle develops and a lobular exudate is thrown out around it. This may be absorbed, showing no trace, or it may leave the thickened fibrous strands leading out to the lung surface. If it is not absorbed caseation is apt to take place, and if the caseation breaks down or liquefies, cavitation will result. This type of lesion is nearly always chronic in nature and may or may not produce symptoms or physical findings.

Caseous pneumonia is an advanced stage of tuberculosis and usually follows apical infection, either by direct extension in the same lobe or by blood stream or droplet inhalation, to other lobes. The bronchial, disseminated type is the more common. The amount of fibrosis present depends upon the protective power of the patient and is in direct proportion to the extent of the infection, plus the immunity of the host. Thus there is the mixed type, exudative (pneumonic) infiltration which fills the air cells and the proliferative reaction, which tries to wall off the invasion by fibrosis. This type of pathology is classical on the x-ray films and should almost never be mistaken.

The acute tuberculous pneumonias are chiefly exudative in character and only become caseous if the patient survives the initial reaction. Differentiation by x-ray films from non-tuberculous pneumonia is impossible unless there is a fibroid lesion in one apex; even then the pneumonia may not be tuberculous.

Mediastinal tuberculous involvement in the adult is usually associated with advanced lung tuberculosis.

A pleural effusion, or fibrous pleural change, due to tuberculosis, if unaccompanied by typical lung infiltration, cannot be differentiated by x-ray from non-tuberculous forms. A pleural effusion, however, in the presence of a fan-shaped infiltration in the upper lobe, may practically be considered due to tuberculosis. Differential diagnosis by film is not always absolute, but the majority that show roentgen pathology can easily be classified, and with a knowledge of the history, this percentage is increased.

Slight indefinite changes may be produced by chronic sinusitis or other upper respiratory infection; classification is not possible. Bronchiectasis can sometimes be detected by study of the primary films, but conclusions are apt to be misleading without corroboration from lipiodol injections.

Lung abscess will often show on films so as to be unmistakable even in early or recent types that can scarcely be distinguished in any other way.

Thoracic tumors and malignancies present characteristic changes.

Massive collapse, obstructive atelectasis and pleural effusion, extending from base to apex completely blot out all lung markings and are difficult of differentiation by x-ray. A large pleural effusion, under pressure, causes displacement of the mediastinal viscera.

Lung abscess, centrally located, inter-lobar empyema and localized pneumonia resulting from foreign bodies in the bronchi, show on the films but are difficult to differentiate.

Pneumoconiosis may produce changes in the lungs which simulate almost every form of tuberculosis except the cavity formation.

Aneurysm, sub-sternal thyroid or other cardiac pathology have been mistaken for tuberculosis; x-ray differentiation here is not difficult.

Cavities are dangerous complications in pulmonary tuberculosis and should be recognized early. They are the source of much of the positive sputum. There are three principal types:

1. Small honeycomb-like areas in a badly infiltrated lung.

2. The large single round cavity with thick or thin walls.

3. The irregularly shaped large or small, occurring single or multiple.

The first two types may occur early in the progress of the disease and unless collapsed will result

in the spread of the disease by giving off bacteria laden exudate some of which may be aspirated into healthy lung tissue in the individual. The third type is seldom, if ever, eradicated. They occur in the far advanced cases and their shape is due to nature's attempt to wall off the diseased area. Fibrosis and pleural thickening prevent collapse; consequently these cavities, at irregular intervals, will discharge an exudate laden with germs. These are the carriers who should guard carefully their sputum.

In reporting on lung tuberculosis from x-ray examinations the summary should show the stage of the disease: *i. e.*, minimal, moderately or far advanced, as fixed by the National Tuberculosis Association; also complications and associated pathology which may be present.

Just a word on "activity" from the x-ray standpoint. If "activity" means fever, night sweats, toxemia, loss of weight, etc., this information is not gained from the film. However, if "activity" means active pathology, then a cavity, a progressive lesion, or a recent exudate in the presence of fibrosis must be active. If the disease is to be controlled active pathology should be treated, irrespective of symptoms.

The classical syndrome—history of contact, loss of weight, fatigue, cough, afternoon temperature, moist rales and a positive sputum—is found in patients with either moderately or far advanced tuberculosis. The general practitioner of medicine, dealing with this syndrome, has found the diagnosis easy. It is this ease of diagnosis that has caused the average physician to lose interest in medical meetings where tuberculosis is to be discussed; also, since the diagnosis is established, x-ray study is unnecessary, and he is skeptical of the curability of the patient. Treatment usually will take one of three forms: (1) the patient goes to a sanitarium, (2) makes a change of climate, or (3) is treated symptomatically at home. A roentgenogram of the advanced case helps to evaluate the prognosis and determine what methods of treatment must be undertaken. It will show (1) the extent of the involvement, (2) the type of pathology, (3) complications and (4) evidence of healing, etc. Unilateral pathology, with cavity formation, may need pneumothorax; tuberculous pneumonia, complete bed rest; the fibroid case, symptomatic treatment or change of climate.

Five thousand chest x-ray examinations made for the United States Veterans' Bureau were classified as follows:

1. Definite pathology indicative of tuberculosis	1,620	32.2/5%
2. Normal chest findings	1,590	31.4/5%
3. Non-tuberculous pathology	1,790	35.4/5%
(a) Slight pulmonary fibrosis	770	15.2/5%
(b) Fibrous pleurisy without lung pathology	460	9.1/5%
(c) Unclassified lung pathology	370	7.2/5%
(d) Other forms of intrapulmonary pathology	190	3.4/5%

CONCLUSIONS

(1) Chronic lung or pleural pathology can be estimated accurately by x-ray examination. Differentiation should not be attempted in typical cases without the knowledge gained by history, and in atypical cases, by history, physical and laboratory procedure.

(2) Tuberculosis of the lungs will often be shown by the x-ray before clinical signs and symptoms are present.

(3) The adult patient with normal roentgen chest findings should not be diagnosed as definitely tuberculous without at least two positive sputums. Treatment should not be delayed for a definite diagnosis.

(4) X-ray interpretation should be entirely independent of the clinical examination; if not, there is a tendency to place too much importance on minor changes, or interpret them to conform to the clinical findings.

(5) Roentgen chest findings usually can be classed as positive, normal or doubtful. Given a patient with doubtful or questionable roentgen findings, the clinical study should be more intensive.

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INDIANA UNIVERSITY SCHOOL OF MEDICINE
(Seminar December 12, 1930)

MEDICAL CASES:
A CASE OF ENDOMETRIOSIS

EDWARD G. BILLINGS, M.D.

The medical problem for presentation this evening is one of vicarious menstruation from the zone surrounding a scar on the anterior abdominal wall, a case of post-operative endometriosis of the anterior abdominal wall.

The term endometriosis indicates a morbid overgrowth of endometrium-like tissue in an abnormal location. The anatomical distribution of such ectopic endometrial tissue is varied and gives rise to highly diversified clinical manifestations which up to a very few years ago had been regarded as representing entirely separate entities.

This endometrial tissue growth may occur in any of the pelvic viscera, on the pelvic and abdominal peritoneum, along the gastro-intestinal tract, at the umbilicus, in post-operative scars of the abdominal wall, and in various other places anatomically more or less remote, subsequent to operations on the uterus involving the endometrium or endosalpinx.

Von Rokintansky, Sampson, Opitz, R. Meyer, Luden and others have reported many cases having endometrial implants in the tissues of the abdominal wall as well as in other locations. Considering the total number of cases of endometriosis, that of the anterior abdominal wall occurring at the site of operation is more or less a rarity.

Mrs. L., white, aged thirty, married, and the mother of two children, entered the Robert W. Long Hospital on November 24, 1930, complaining of scant stools, vomiting soon after the ingestion of food, and especially of a terrific pruritis and burning about a post-operative scar located in the lower right quadrant of the anterior abdominal wall. This latter phenomenon, sometimes accompanied by a formation in this region of vesiculo-papular areas filled with a sero-sanguinous fluid, occurs usually during the latter part of the menstrual periods, which in turn are characterized by considerable metrorrhagia and menorrhagia.

Some six years ago she underwent a surgical procedure at which time, through a McBurney's incision, the appendix and a cystic portion of the right ovary were removed. The post-operative course was uneventful until one and one-half years later, at which time the skin eruption mentioned was noticed. It occurred simultaneously with the menses. Also, during the past four and one-half years the patient has experienced lower abdominal pain as well as general abdominal soreness at the time of the menstrual periods.

Clinically, from the physical standpoint, the case is negative except for an area about five by seven centimeters, surrounding a six-centimeter scar at McBurney's area, which is scaly, brownish-violet in hue, nodular, rather tender, and imparts a fibrinous feel to the examining finger. At the present time, the patient having just ceased menstruating, there are about five or six small, very red macule-like areas scattered over the involved area of skin. There is also present an endocervicitis, a slight laceration of the cervix, a retroversion of the uterus, and some tenderness of the right pelvic adnexa.

The laboratory tests and examinations are essentially negative with the exception of the tissue removed from the area about which I have just spoken. This shows a thin and slightly pigmented layer of squamous epithelium. The epithelium is otherwise normal. The corium at different levels is occupied by small nests of epitheloid cells. These cells are unlike any seen in normal skin. They are fairly large, have a compact nucleus, and a relatively large amount of cytoplasm.

As treatment, we propose utilizing deep x-ray therapy to the ovaries in an effort to produce a cessation of the menstrual cycle.

BOOK REVIEW

Burton D. Myers, M.D.

Von Mollendorff of Freiburg is editing an enormous, many volume Handbuch der Mikroskopischen Anatomie des Menschen. Collaborating with him are some of the best histologists of Europe. The part devoted to the nervous system is a great volume of 1100 pages, beautifully illustrated.

It is my desire to review for you the high points of a few of the chapters on the sympathetic nervous system, and the neurone, written by Beilschowsky, of Berlin, and Stohr, Jr., of Bonn, each of whom is eminent in his particular field. Beilschowsky, you will recall, is known over the scientific world for his special technique of staining the axis cylinder of nerve fibres. This was first done by Golgi, of Pavia, with his silver method. An advance in this technique was made by Ramon y Cajal, of Madrid, and later still by Beilschowsky.

The volume is a critical review of the literature with hundreds of references. It is a critical weighing of evidence for and against various views, with the author's statement of judgment as to where preponderance of evidence lies.

A matter emphasized in this Handbuch, and also in a recent article from the anatomical laboratory of V. Lenhossek, of the University of Budapest, is that the terms white and gray rami are misnomers, in that every ramus communicans is a mixture of both white and gray fibres. This does not in any way change our view of the direction of impulse or location of cell bodies of neurones involved. It merely says that as a rule there are gray and white fibres in each ramus.

It is quite possible, indeed probable, that it will be found that preganglionics leave the spinal cord over a greater number of spinal nerves than we teach today.

Furthermore, Stohr, Jr., states that there has never been an anatomical demonstration of the ending of a preganglionic nerve fibre, that is, of an axone of a preganglionic neurone. If such ending is not demonstrable, or does not exist, then we have to deal not with neurones synapsing to form conduction paths but with a syncytium. If in the sympathetic nervous system we are dealing with a syncytium, then we are not dealing with neurones as at present defined, since by definition the neurone consists of a nerve cell with its processes, and this neurone is an entity, a unit. If, however, there is continuity of cell protoplasm at the synapse, the cell body with its processes is not an entity and therefore not a neurone.

It becomes desirable, therefore, to check on present views of the neurone.

The universally accepted definition of the neurone is that it consists of a nerve cell with its processes.

The neurone is considered as an anatomical entity, as a genetic entity, and as a trophic entity.

It is regarded as an anatomical unit since the processes are outgrowths of the nerve cell and remain independent throughout life as is shown by the fact that degeneration does not jump across the synapse.

It is regarded as a genetic unit in that it is a development of the neuroblast which is an embryological unit.

The neurone is regarded as a trophic unit since injury affects the whole neurone. On severing the axone of a neurone, the severed part degenerates, the cell body undergoes tygrolysis and in regeneration the severed part is replaced by outgrowth from the central stump.

These neurones are joined together by synapses into conduction pathways.

These views are so generally accepted, so a matter of course, that we forget or do not know the long and weary way anatomists have had to travel to reach this confident view.

Let us review briefly the history of the neurone theory.

Fontain, 1781, is regarded as the discoverer of the nerve fibre. Prior to his time anatomists knew there were such structures as nerves, but they knew nothing of their intimate structure. Fontain, therefore, contributed definitely to our knowledge of nervous anatomy when, examining peripheral nerves, he noted that they were built up of a great number of simple cylinders of like form. Please note that Fontain had no idea of the presence of an axis cylinder, the actual conduction element; he did not know of the nerve cell or of the nerve fibre as a process of the nerve cell.

Treviramus in 1812 described the medullary substance and the ensheathing neurilemma.

Remak (1837) described the axis cylinder. The major elements of the *nerve fibre,* axis cylinder, medullary substance and neurilemma, were now anatomically demonstrated, but the origin of these fibres and their connection with the nerve cell was still undemonstrated. Later (1844) he described the neurofibrillæ in unstained preparations.

Schwann (1838) propounded his cell theory. He recognized the ganglion spheres as nerve cells and he believed the nerve fibre was developed out of the fusion of a series of primary cells provided with a nucleus. He distinguished the delicate membrane which we call the sheath of Schwann, from the white, fatty substance lying on the inner side of this membrane and from the central band (the axis cylinder) described by Remak.

Hannover (1840) was the first to use fixed and hardened material for his investigations. With the aid of his chromic acid sections, Hannover came to the conclusion that the brain fibres arose from brain cells and remained in connection with them throughout the entire life of the individual.

It remained for the great anatomist Kolliker in 1844 to demonstrate with certainty the *connection between the nerve fibre and the nerve cell.* We then had the *nerve cell and its processes,* though the origin of these processes is wrongly understood.

Bidder and Kupfer (1857) held that the Schwann theory that the nerve fibre arose through the coalescence of cells arranged in long rows was an error. He thought, but did not demonstrate, that the nerve fibre is an outgrowth of the nerve cell.

Gerlach (1858) made an important contribution to investigative methods in the staining of animal tissues. Gerlach stained his sections with a weak solution of ammonium-carmine and made use of the method introduced by Clark for clearing with ethereal oil and mounting in Canada balsam.

Golgi, in 1883, with the silver method which he introduced, described the internal reticular arrangement of the nerve cell which has come to be known as the Golgi apparatus.

It was not until 1887 that Forel outlined the conception of the central nervous system and brought into general recognition what later was to be known as the neuron theory. He said: "I assume that all fiber systems and so-called fiber networks of the nervous system are nothing other than nerve processes each of a definite ganglion cell. The nerve process passes out of the cell, branches sometimes near, sometimes at a farther distance from the cell, is often surrounded with medullary substance, associates itself with many medullated fibers and always ends as much divided, synapsing, but never anastomosing branches." Forel was influenced in reaching this conception not only through the discoveries resulting from the Golgi method, but also through the results of the experimental work of von Gudden.

Strong support was given the theory of nerve units arranged in series as conduction paths by the embryological work of His (1887). What Bidder and Kupfer assumed, His proved with certainty. Ramon y Cajal, Kolliker, von Gehuchten, Retzins and the younger von Lenhassek contributed much to the strengthening of the subject matter of instruction. We have also the contribution of Altman (1890) on the granular elements of the cell, which he called bioblasts, and which have come to be known as Altman's granules and are now recognized as being for the most part identical with mitochrondia.

The neuron theory was formulated by Waldeyer in 1891.

Further progress in our knowledge of the histology of the ganglion cell was made through the staining method of Nissl (1894), and as a result we have the Nissl's bodies added to our conception of the nerve cell.

Summarizing this history we note the following facts with regard to—

A. The Nerve Fibre:

1. The nerve fibre was discovered by Fontain (1781).
2. The medullary substance and neurilemma were described by Treviramus (1812).
3. Remak described the axis cylinder (1837).
4. His proved (1887) the nerve fibre an outgrowth of the nerve cell.

B. The Nerve Cell:

1. The nerve cell was definitely recognized by Schwann (1838).
2. In 1844 Remak described neurofibrillæ in fresh preparations. Later studies with staining methods have added much to our knowledge of these fibrillæ.
3. Golgi (1883 and later) described the Golgi apparatus, an internal reticular arrangement.
4. His (1887) proved the nerve fibre an outgrowth of the nerve cell.
5. Altman (1890) described Altman's granules, which he called bioblasts, and which we know to be, for the greater part, mitochondria.
6. Nissl (1894) described Nissl's bodies.

In addition to these characteristics of the nerve cell we recognize a nucleus and nucleolus, a neuroplasm, or interfibrillar substance, and certain inclusions.

With this review of the history and structure of the constituent portions of the neurone, viz., the nerve processes and the nerve cell, it becomes apparent that the only point where a successful attack may be launched against the neurone theory is the synapse.

The differing views of the synapse arise from two different theories of development of the neurone. Both theories derive the neuron from the neuroblast. But—

1. In theory No. 1 the processes of the neuroblast are believed to fuse at an early date to form a syncytium.

2. In theory No. 2 the processes of the neuroblast are believed to maintain their independence of other neurones throughout life.

One of the first synapses seen was in the olfactory glomerulus. The telodendrions of one neurone arborize with those of another in a minute sphere filled with blood capillaries suggestive of great metabolic activity at the synapse.

In other cases the telodendrions form a basket-like envelope about a cell, and in another type of ending the telodendrions have expanded tips making contact with another cell.

It appears there is an extraordinary diversity of synapse. We may have:

1. Complete separation of neurones at the synapse except for mere contact.
2. There may be continuity of interfibrillar protoplasm without penetration by the neurofibrillæ. In some instances this interneuronic union has taken a differential stain showing it of a different composition from the protoplasm of the neurone.
3. There may be a synaptic membrane penetrated by neurofibrils for a short distance.
4. It is conceivable there may be unimpeded continuity of protoplasm, in which case we are dealing with a syncitium and not with neurones, since by definition the neurone is an entity. In this type of synapse the neurofibrillæ are believed to pass through two or more neurones.

All four of these forms have been described by competent histologists. We are not as yet certain in how far the differences are mere artifacts. It is probable some of the so-called anastomoses are artifacts. It is probable there is a wide variety of kinds of sympathetic junction correlated with physiological differences of great importance.

It is at least a possibility, if not a probability, that within the sympathetic nervous system we are dealing with a synapse so intimate as to constitute a syncitium, in which case, as already stated, we are no longer dealing with neurones as today defined. The simplest way out of this difficulty would be probably in a modification of our definition of the neurone to cover this unimpeded continuity of protoplasm in the synapse.

At all events a complete review of the literature of today warrants the statement that within the nervous system there is no formed element other than the neurone which comes under consideration as the carrier of nervous impulse. All nervous substance is contained solely in the sum of its neurones.

SURGICAL CASES

Frank Ramsey, M.D.

Man, forty-eight years old; admitted to the hospital November 4, 1930. His health in the past has been fairly good until about a year ago when he began to complain of abdominal pain which occurred chiefly in the epigastrium. At the same time he noticed loss of weight and weakness. He stated that these attacks occurred at intervals of one to three weeks, with periods of comfort in between. The pain he described as arising at times in the lower abdomen and radiating to the epigastrium; sometimes starting in the epigastrium and staying there. It usually came from two to three hours following meals, and the only relief he had was vomiting. He never vomited blood except the first few days after he came to the hospital, when he vomited some bright blood, but before entering he had on several occasions vomited coffee-ground material.

General physical examination is practically negative. The laboratory work showed a red count of 4,500,000; hemoglobin, 75 percent; color index, 83 percent; white count, 8,500. Urine, normal; Wassermann, negative; Ewald test meal showed free hydrochloric acid in the gastric content as high as 50 to 60 percent, and was positive for blood; his stools also contained blood.

This patient's stomach was examined by a barium meal and the fluoroscope on November 9th, and showed a large perforating ulcer on the posterior surface of the stomach near the lesser curvature. A lateral view showed a peptic ulcer about 1½ to 2 cm. which was eroded deep into the

muscles of the stomach and had almost perforated the posterior wall.

On November 18th he was put on the Sippy diet, consisting of three ounces of milk and cream every hour from seven to seven; calcined magnesia and soda bicarbonate, grains ten every two hours; calcium carbonate and soda bicarbonate, grains thirty on alternate two hours. At the end of the first week soft-boiled egg, crackers, oatmeal and rice were added to this diet. Within a few days after he was placed on this diet his abdominal distress disappeared, he was comfortable and began to feel a great deal better. On November 20th and 21st his stools still contained blood, but on six occasions thereafter his stools were negative, and at no time since November 21st have we found any blood in the stools. During the last week the patient has gained a few pounds in weight, feels much stronger, and an x-ray examination on December 1st showed the filling defect on the lesser curvature much reduced in size, with no loss of flexibility or peristalsis on the lesser curvature.

This case is presented to illustrate a type of ulcer which very often needs to be treated surgically—an ulcer on the posterior surface of the stomach which tends to perforate, which usually should be treated by resection. Usually we give these patients six or eight weeks' trial with medical treatment before considering surgery, and during this time check up to see whether there is blood in the stools, x-ray frequently, and note the progress of healing of the ulcer. This man's ulcer has healed quickly, and if it continues to do so he will not become a surgical problem.

EXAMPLES OF THE USE OF MEDICAL MOTION PICTURE FILMS

W. D. Little, M.D.

The first picture is part of the film which Doctor Gilman took to the State Medical meeting in Fort Wayne. He was to show it twice and he showed it twelve times—ten times by request. It was made at the City Hospital through the courtesy of Doctor Doeppers. You may feel inclined to criticize the technique because there is a fly buzzing around the patient during the cisternal puncture, but I feel it serves a good purpose, because it shows the patient was more concerned with the fly than the puncture. It was made outdoors in August on the City Hospital roof.

The second picture is a combined median and ulnar nerve lesion in a little boy who came to the Riley Hospital. Combined injury of the median and ulnar nerve is not uncommon, but such injuries usually occur as a part of extensive and complicated wounds which damage a great deal of the hand and wrist. In this boy the nerve injuries were the only things of importance. No tendons, arteries or other structures were cut.

The third picture is one of Doctor Garceau's orthopedic patients which shows that motion pictures make a better record of many orthopedic patients than any other record we can have. We do not have a follow-up on this boy, but we will have pictures at various times to show his progress during all stages of treatment.

No one will dispute that the films which may be purchased or rented from the Eastman teaching films are of use, but many are suitable for a lay audience rather than a medical audience. A great many amateur photographers have attempted to make pictures of operations, but even when panchromatic film has been used there is not enough differentiation between blood and muscle and fat and the other structures to make them very valuable when projected on a screen. It is not possible to distinguish the different structures very clearly, and most films of this type have been a disappointment. Some orthopedic operations may be well shown, especially if animated drawings are used in connection. The chief use, it seems to me, for motion pictures in medicine is first to make a better record of some patients than can be made in any other way; the second, it will allow the accumulation of a vast variety of cases with the same deformity. We have now a great many different pictures of patients with club feet, and it will be possible for orthopedists teaching club feet to pick out of these pictures different types and show them all at the same time, whereas it would rarely be possible to have all types of club feet in the hospital at the same time. In addition, it will preserve for future observation the rare and unusual cases that most of us would see perhaps once in a lifeime. We have a good example of that. A child came to the Riley Hospital with a peculiar involvement of the right upper extremity following diphtheria. As far as I know the consulting staff was never in absolute agreement as to the diagnosis. We do not have a follow-up picture of that boy yet, but it is unusually rare and we probably will see nothing like it again.

ORTHOPEDIC CASE

W. V. Wood, M.D.

Patient, colored, age seven. Admitted to hospital for correction of deformities of both lower extremities. Weight at birth ten pounds. Was breast fed and according to mother presented no feeding problem. First tooth at seven months. Walked at fifteen months. First sign of deformity was noticed at twelve months. Deformity became more severe when patient began walking. No change in deformity during the last two years. No serious illness.

On physical examination a slight Harrison's groove was found, also a slight rachitic rosary. X-ray examination was negative for bony pathology, except the deformity. Lower extremities show extreme lateral and anterior bowing of both tibiæ at lower and middle third.

This case is presented to show the difficulties sometimes encountered in the correction of bow legs.

Braces will not correct the deformity because of the severe anterior bowing.

The method of treatment to be undertaken will be separate osteotomies of both tibiæ to correct the bowing. This will produce severe knock knee, which must be corrected later by osteotomies of both femurs.

OBSTETRIC CASE

DWIGHT DEWEES, M.D.

This patient, a gravid para III, was admitted to the Coleman Hospital November 6th, complaining of bleeding of a severe type for the past week, and severe pain in the lower abdomen. The present illness began with her last normal menstrual period in March of this year. She did not flow at all from March until June. In June she was standing in a downtown drug-store when she had a sudden and severe pain in the lower right abdomen. She did not faint, but had to go home and to bed and required a great deal of morphine to control the pain. At that time she ran a temperature of 103°, and immediately following that began to menstruate, and did that off and on from June until she was admitted to the hospital.

About the first of September she began to feel fœtal movements; they were in the left side of the abdomen, rather high, and very painful. During this entire time from June on she had had to have morphine and codein to control pain.

She had a very good doctor from the outside who made a diagnosis of pelvic inflammatory disease in June, which I suppose almost anyone would have done. About two weeks after the first feeling of fœtal movements they ceased and she had felt none for about six weeks prior to admission. One week before admission she began to bleed profusely and the doctor thought she certainly was about to miscarry. She was admitted as a threatened miscarriage. Our routine treatment in abortion cases, if they are not bleeding severely, is to leave them alone for a while, no pelvic examination for a few days, in order to see what their condition is and whether they are running a temperature or not. In accordance with that practice this patient did not have a vaginal examination for three days after admission. When this examination was made on the third day after admission we found a large mass just above the symphysis pubis extending up about five centimeters below the umbilicus. It was extremely tender and painful anteriorly and also posterior to the cervix. The cervix was soft, but not extremely soft, and it was not dilated widely, although the tip of the finger would enter the external os. The cervix was not as soft as it should have been for a seven months' pregnancy. It was large and showed lacerations from previous delivery.

In addition to this mass she had a rather indefinitely outlined mass above and to the left extending about four or five centimeters above the crest of the ilium, or about to the level of the umbilicus. There was a distinct pulsation over the well-defined mass in the midline over the symphysis.

A presumptive diagnosis of intra-abdominal pregnancy was made. We took an x-ray flat plate of the pelvis and found a fœtus over in the left side above the iliac crest. The x-ray men would not say whether this was in or out of the uterus; they said it was within range of possibility of being in the uterus. So we took another x-ray and this time we injected lipiodol into the uterine cavity. This film showed definitely that the fœtus was outside the uterine cavity. The uterine cavity was greatly elongated and pushed to the left. The right tube was not visualized. There was some of the lipiodol in the left tube. The fœtus was shown just above the visualized portion of the fundus.

At the time the laboratory work was negative except for a moderate degree of anemia. Red-cell count, 4,000,000; white, 10,000; hemoglobin about seventy percent.

Due to the fact that the patient required morphine all the time to control pain, and also due to the fact that she was losing a great deal of blood, an operation was imperative. The operation was to open the abdomen through a midline incision, and the mass previously palpated was exposed in the right broad ligament, and leading off from that was an umbilical cord. The fœtus, entirely in the abdominal cavity with no sac around it except a thin membrane, to which the greater omentum was loosely adherent.

The problem was how much to do, and since the operation there has been quite a good deal of discussion as to whether it would have been all right to remove the baby and leave the placenta. The baby was not causing pain or hemorrhage; it was dead and it was high in the abdomen, while the pain was in the lower abdomen. The thing we tried to do was to ligate the right side of the broad ligament and remove the mass. There were no adhesions anteriorly and very few superiorly. After ligating the right side of broad ligament close to the uterus we attempted to raise the mass forward, and the difficulty was encountered with adhesions on the posterior wall of the mass. Therefore, the further procedure was to incise the mass and remove the placenta, and during that the posterior wall of the false sac was torn and a terrific hemorrhage followed. The cavity was packed with a sponge and an attempt made to repair the posterior tear. It was eventually repaired, but in the meantime the patient almost died. We gave her 1,000 cubic centimeters of saline solution during the operation and immediately following 800 cubic centimeters of blood was transfused. The sponge placed in the cavity left by removal of placenta was supposed to be left only temporarily, but it was allowed to

remain for fear of further hemorrhage. In addition a gauze packing was placed above and down next to the hole in the false sac. For three or four days following the operation she suffered a great deal from nausea and vomiting, but as soon as the packing next to the intestines was removed her condition improved. Since then her condition has improved rapidly and at present she is practically cured. There is no doubt she will make a complete recovery.

SPECIAL ARTICLES

THE PRESIDENT'S MESSAGE

UNITY AND COOPERATION OF PHYSICIANS IN CERTAIN WELFARE WORK

The Indiana State Medical Association has a liaison committee the chairman of which is our president-elect. This liaison committee has been and is now doing a splendid work. Recently its chairman was in session with the chairmen of committees appointed by the following associations:

The Indiana Hospital Association.
The Catholic Hospital Association of Indiana.
The Indiana State Nurses' Association.
The Indiana State Dental Association.
The Indiana Pharmaceutical Association.
The Indiana Tuberculosis Association.

The purpose of this session was to develop a spirit of mutual interest in the mutual problems of these naturally allied interests. The chairman of our liaison committee reports that the idea went over big. However, he stressed the very important point that these committee chairmen in turn must now sell the idea to their respective associations which they represented. In the January issue of The Journal there appears my greetings to the members of the Indiana State Medical Association. I stated that satisfactory and progressive medical legislation implies a concerted policy on the part of all our members. It should be remembered that what benefits the medical profession as a whole benefits the individual members thereof and, accordingly, every member of our Association should put forth an earnest effort to promote the welfare of all. Any organization that is sincere in its efforts in relieving human suffering and misery within the boundaries of our state is entitled to and deserving of the cooperation of our Association. The report of the chairman of our liaison committee is in sympathy with the ideas I have expressed. It is now absolutely essential that these ideas be sold to our members. A concerted policy on the part of all our members must be obtained before successful results can be attained.

The Indiana State Tuberculosis Association was represented in the above mentioned session. It is a well-known and recognized fact that this association is doing a most commendable work. The members of the Indiana Tuberculosis Commission, appointed by Governor Leslie to investigate the tuberculosis situation in our state, were individuals of the highest integrity, and the task assigned to them has been performed in a most capable and meritorious manner. It is true that this commission comprised laymen exclusively. However, all of them were clear-thinking and intelligent individuals, and all of them gave liberally of their time because of the fact that they were keenly interested in attaining a satisfactory solution of the work that had been assigned to them. While the medical profession had no representative on this tuberculosis commission, it may interest many of our members to learn that said commission did, not infrequently, confer and consult with members of the Indiana State Medical Association in order that their plans of procedure might be perfected. Further, this Indiana Tuberculosis Commission, before making public its most complete and very illuminating report, invited the president, the president-elect and the secretary of the Indiana State Medical Association to meet with the chairman and secretary of said commission and discuss pro and con the report that had been formulated by them. The above named officers of your Association accepted this invitation. They were favorably impressed with the report, and reported to this effect to the Executive Committee of the Indiana State Medical Association. After receiving this report, your Executive Committee voted unanimously in favor of it and the plans of procedure that were advocated by the Indiana Tuberculosis Commission. When a movement such as this has the endorsement of every so-called "bloc" in our state, and especially when it has to do with the relief of human suffering and misery in our state, it is very timely and most fitting that it also should receive the endorsement of the Indiana State Medical Association. Your Executive Committee in endorsing this report of the Indiana Tuberculosis Commission were sincere in the belief that they were endorsing a movement that implied medical progress. This action on the part of your Executive Committee will in all probability be regarded by some of our members as just another step toward state medicine. As to just what this much discussed and supposedly threatening bugaboo, state medicine, is, I do not know. I may perhaps have something to say regarding this subject in the near future. At the present time the mention of the term state medicine does not cause me any undue anxiety. I am very thankful for the possession of sufficient optimism as to make me opine that state medicine and a concerted policy on the part of all or even a majority of the members of the Indiana State Medical Association is not compatible. If perchance state medicine should overtake us, it can only imply that very unfortunately the medical profession failed in the performance of its assigned duties, and the censure for this disaster must very properly be placed at its own door. State medicine is a possibility—yes, a probability—but not with a concerted policy on the part of members of the Indiana State Medical Association.

A. B. Graham.

DIPHTHERIA DEATHS IN 1930 DECEMBER

December had 15 diphtheria deaths distributed —except one in DeKalb county—in the same counties as have already had deaths this year. This makes a total of one hundred thirty-two for the state, but there will be three or four others inasmuch as delayed reports are held to the end of the year. We are assured, however, of a new low rate, which is all the more interesting in view of the fact that the rate of last year was a new low rate.

A careful analysis of the data collected during the past year is now being made and will be published in THE JOURNAL very soon.

We are beyond doubt entering the new year in a better condition regarding diphtheria than was the case one year ago. Here's for another new low record!

The following counties have been the worst offenders in 1930—their size being considered: Knox, Lake, Lawrence, Madison, Marion, Vanderburgh, St. Joseph.

Interesting in December is the fact that there was not a single death in the southern half of the state. Hurrah for southern Indiana! Early in the year we were riding the counties in the pocket, but they cleaned up. It can be done.

Diphtheria deaths by counties:

	Total for 1930	*December*		*Total for 1930*	*December*
Allen	2	0	Madison	5	3
Carroll	1	0	Marion	19	4
Clark	4	0	Miami	1	0
Clinton	1	0	Monroe	5	0
Daviess	1	0	Montgomery	2	0
Dearborn	2	0	Morgan	1	0
DeKalb	1	1	Perry	1	0
Delaware	2	0	Pike	1	0
Dubois	1	0	Porter	1	0
Elkhart	4	2	Randolph	1	0
Fayette	1	0	St. Joseph	6	1
Floyd	1	0	Spencer	1	0
Franklin	1	0	Sullivan	2	0
Fulton	1	0	Tippecanoe	1	0
Gibson	1	0	Tipton	2	0
Greene	1	0	Vanderburgh	6	0
Hamilton	2	1	Vigo	3	0
Howard	1	0	Warrick	2	0
Jay	2	0	Wayne	1	0
Knox	9	0	White	2	1
Lake	22	2			
Laporte	2	0			
Lawrence	6	0	Totals	132	15

ABSTRACTS

FUNCTIONAL DISORDERS OF MENSTRUATION

Emil Novak, Baltimore (*Journal A. M. A.*, Oct. 25, 1930), concludes his discussion as follows: Recent advances in knowledge of the physiology of menstruation make it necessary to revise the interpretation of the mechanism involved in functional menstrual disorders, and, of course, have a bearing on problems of treatment as well. Amenorrhea and hypomenorrhea (scanty menstruation) are most often of constitutional or endocrinopathic origin, local pelvic causes being much less common. The ovarion function is singularly sensitive to nutritional and circulatory deficiencies, disappearance of the cycle being the common result. The treatment of the amenorrhea produced by such general diseases as tuberculosis, anemia and dietary deficiencies is, of course, the treatment of the underlying conditions, and endocrine therapy is contraindicated. Of the endocrine causes of amenorrhea the most common are ovarian deficiency, hypopituitarism and thyroid disorder, most often hyperfunction, but at times hypofunction. These types are often distinguished by fairly well-defined clinical syndromes, such as the adiposogenital dystrophy of hypopituitarism, but the scientific basis for such differentiation is often incomplete. Amenorrhea is often unaccompanied by other symptoms and may need no treatment except reassurance of the patient as to the essential harmlessness of the condition. In other cases, as when it is subordinated to the accompanying sterility, efforts at treatment are indicated, though unsuccessful in a large proportion of cases. The three organ extracts that are commonly employed are those derived from the ovary, the anterior pituitary and the thyroid, in various combinations. The oral administration of ovarian extracts is worthless, as far as any effect in the re-establishment of menstruation is concerned. The same statement probably applies to the older forms of preparations for hypodermic administration. Ovarian follicle hormone, more recently employed, has so far yielded no worth-while therapeutic results, important as it is physiologically. The recent discovery of an active corpus luteum principle may improve the results somewhat, but these will still be far from ideal, as neither of the principles named apparently has any stimulating effect on the ovary itself. The treatment of amenorrhea by means of the anterior pituitary suggests itself as offering the best hope for the future, because of the striking effect on the follicle apparatus produced by the hormone of this gland. If the latter is made available for clinical use in some convenient form, its employment in certain cases of amenorrhea and sterility will be rational, although perhaps even with this the results may be disappointing. The oral administration of pituitary substances is probably without value. For the present, thyroid therapy, at times on rational indications, at times on empiric or semiempiric grounds, is still the most popular and perhaps the most frequently helpful plan in most cases. Not much can be added as to the treatment of too frequent or too infrequent menstruation (polymenorrhea or oligomenorrhea) because of ignorance as to the nature of the factor or factors that normally regulate the menstrual rhythm. The treatment of oligomenorrhea is in general similar to that of amenorrhea and hypomenorrhea. Excessive menstruation of functional nature (hypermenorrhea) is an extremely frequent and important disorder, especially in women at or near the menopausal age, because of the fact that, like other types of bleeding at this age, it calls for differentiation from that produced by cancer. When potent corpus luteum extracts become available commercially, their employment in this condition will be rational and may possibly yield excellent results. Various systems of naming these disorders have been suggested, but the one that seems most logical is as follows: amenorrhea, for the absence of menstruation; hypomenorrhea, for a deficient amount of the menstrual discharge; hypermenorrhea, for an excessive menstrual flow; oligomenorrhea, for too infrequent menstruation; polymenorrhea for too frequent menstruation; dysmenorrhea, for painful menstruation. Various combinations of these terms are at times called for, and would be self-explanatory, viz., oligohypomenorrhea, oligohypermenorrhea, polyhypermenorrhea, and so on. While the organotherapy of menstrual disorders is still unsatisfactory, the recent addition to our knowledge of the physiology of the sex cycle justifies the hope that before long the problem can be approached much more intelligently and precisely than in the past. It would seem quite likely, for example, that the etiology of the various disorders will soon be determinable by studies on the biologic chemistry of the blood. In other words, just as quantitative determination of blood sugar or blood urea can now be made, it will perhaps be possible to determine deficiency or excess of such principles as the ovarian follicle hormone, the anterior pituitary or thyroid secretions. These methods of course have already been used to some extent, but their refinement, simplification and wider utilization may make of organotherapy a more scientific procedure than it has been in the past.

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EDITORIALS

MORE LIGHT ON GALL-BLADDER MORTALITY

Autolysis of living tissue *in vivo* always has been an interesting subject, both for the experimental biologist and for the practical surgeon. The surgeon is interested because he often finds it necessary to transplant living tissue, such as fascial, skin and bone grafts, and their behavior after transplantation is a matter of great importance.

Recently this subject has been given considerable attention because the question has been raised as to an explanation of events which follow the transplantation of liver tissue in the peritoneal cavity. The most recent contribution on the subject is by Andrews and Hrdina in the January issue of *Surgery, Gynecology and Obstetrics*. It previously had been observed by a number of investigators that when liver tissue was excised under strict aseptic precautions and placed in the peritoneal cavity of the host, the dogs invariably died promptly in twenty-four hours. Autopsy constantly revealed peritonitis, and the presence of *bacillus Welchii* or a closely related anerobic bacillus.

The question has arisen as to where these organisms originate. Ellis and Dragstedt, in *Archives of Surgery*, January, 1930, confirming the work of Wolback and others, state that the uncontaminated livers of normal healthy adult dogs regularly contain a gram-positive anerobic bacillus. They thus conclude that the peritonitis results from the organisms contained in the transplanted liver. Andrews and Hrdina, however, in what appears to be a very carefully controlled series of experiments, conclude that these organisms come from the intestine of the dog, made permeable by the action of the autolyzing liver. In any event the work is interesting for the light it may throw on certain fatalities following gall-bladder operations, and which by some surgeons has been ascribed to liver dysfunction. The assumption that liver dysfunction of sufficient severity to produce death following gall-bladder surgery is wholly without warrant. Neither experimental studies nor autopsy findings support such a conclusion. That infection resulting in peritonitis is the actual cause of death is much more frequent than suspected seems to be established, and it is just probable that an anerobic organism of the type found in the above described experiments may be the offending organism.

BACTERIOPHAGE FREE IN ILLINOIS

Interesting in two separate connections is an article in a recent number of a periodical published weekly by the Illinois Department of Health (*Illinois Health Messenger* for December 15, 1930). The announcement is made that the State Department is passing for free distribution to physicians three different kinds of bacteriophage which it recommends strongly for the treatment of boils, carbuncles, infected wounds, urinary infections and typhoid fever. The Michigan Department of Health has been doing the same for some two or three years, but in the latter instance the work has been largely for the purpose of research in bacteriophage. In the action of the Illinois department we see a high recommendation of bacteriophage in the treatment of certain infections. This method of treatment is still young and by no means widely practiced, but seems to be coming into an enviable position in the favor of the profession. There are now a great many references made to its successful use, and one of the latest and most convincing is by Dr. John Kolmer of the University of Pennsylvania.

In another way we are not so pleased. Just why a state board of health feels called upon to manufacture biological products and distribute them *gratis* is not quite clear. It is hard to believe that these laboratories can make better products than can recognized commercial houses, and it is equally hard to believe that they can save money by going into the manufacturing business, as they are planning only to serve those who are indigent. Boards of health undoubtedly could get very low prices on products by buying them in large lots. Boils and urinary infections are no more public health problems than cancer or diabetes, and we cannot see why the state should enter into unfair competition with recognized biological houses in the manufacture of a product that should be sold rather than given away. We do not see that there is any excuse for teaching the public that it can or should receive free medical service or products from the state. This pauperization of the public by the state is really quite serious business.

There is still another aspect to the problem. Bacteriophage is a new product that requires certain understanding and skill for its proper use. It gives promise of being an especially valuable product, but very easily could be ruined by injudicious use. We are very much afraid that by making it free and by giving it such a blanket endorsement as sponsorship by the state depart-

ment implies that it will be used wastefully and indiscriminately in conditions for which it is not indicated and may as a result come into disrepute. We repeat that we think the Illinois department has made a mistake.

THE ESSENTIALS OF SMALLPOX VACCINATION

With the prevalence of smallpox in Indiana it is well for every practicing physician to know something about the essentials of smallpox vaccination, and particularly if we are to obtain the best results from such an invaluable preventive measure. Perhaps little should be said as a guide to the work done by physicians who have taken the time and trouble to investigate the subject thoroughly, but for a very large class of physicians who are not exercising all the precautions necessary in order to secure the best results, a little specific information may not be amiss. This thought is stimulated as a direct result of the belief on the part of many physicians that if a vaccination does not "take" then the subject is immune, whereas there may be several reasons why the subject does not present a successful "take." In this connection we quote from the United States Public Health reports, November, 1930, that when potent smallpox vaccine is applied below the superficial layers of the epidermis, irrespective of the method used for penetrating these layers, a reaction will take place, reaching a maximum which may be observed in one to fourteen days, depending upon the degree of immunity of the subject. Absence of this reaction indicates that the vaccine is incapable of protecting against smallpox, *and not that the subject is immune*. The nature of the reaction consists in the formation of a papule which appears at the inoculation site from one to six days following the vaccination. This becomes vesiculated from one to three days later, the vesicle being surrounded by a narrow red margin and areola. This vesicle increases in diameter at the rate of approximately one m.m. in a day. On about the seventh day the skin outside the areola begins to turn red, and this area of redness rapidly extends until the eighth or the fourteenth day when the maximum diameter of the area is reached. After that the area rapidly fades and the vesicle already crusted in the center extends slightly for a day or two and then is soon completely replaced by a dark brown crust which is still surrounded for some days by a narrow areola. If kept dry the crust will separate in approximately three weeks from the day of vaccination, leaving a red scar which becomes white in a year or so. There usually is a little general reaction, fever, headache, slight swelling of the axillary lymph nodes, all of which subsides promptly. If the subject retains partial immunity, either through previous vaccination or an attack of smallpox, the reaction will be accelerated in development, shortened in time and decreased in severity. If the papule and areola do not appear until the third day and there is no vesiculation, the reaction is not that of immunity but is due to an impotent vaccine and the vaccination should be repeated with a fresh lot, for the vaccination cannot be considered a successful vaccination. Vaccine of full potency should be used, and it may be emphasized that smallpox vaccine can not be kept too cold, for it deteriorates even in an ice box. Therefore the freshest possible vaccine should be obtained, and should be kept very cold, preferably in contact with ice rather than merely on a shelf in an ice box. The United States Public Health authorities recommend that if large quantities are to be used they should be transported in ice-cream freezers or packed with shaved ice in the inner compartments of vacuum bottles. For several very good reasons acetone is recommended as a cleansing agent rather than alcohol. The methods of performing vaccination are inconsequential as long as the area vaccinated is not large and the scratch or other method of penetrating the epidermis does not draw blood which may wash the vaccine out of the abrasion into which the vaccine should be thoroughly rubbed. The vaccination site should not be exposed to direct sunlight until dry. *Dressings are unnecessary* and are harmful if permitted to remain on the arm. Vesicles and crusts should be kept dry, and if necessary to prevent the soiling of the clothing, a fold of sterile gauze may be attached to the garment, not to the skin. The vaccination should be considered successful as soon as the reaction of immunity appears and begins to subside, provided vaccine of full potency has been used. It can not be too strongly emphasized that the freshest possible vaccine should be obtained, and this can be secured by arranging for small and frequent shipments direct from the manufacturer's laboratory.

PROHIBITION FANATICISM

If any cause is worthy of support it should stand on its merits, and it will have a better chance of winning if the arguments presented are logical and truthful. It stands a good chance of losing supporters among a great many intelligent people if the sponsors for the cause use vilification and insult to not only those who may be opposed to the cause but to many others who naturally support a cause if presented in its proper light. This comment is suggested as a direct result of observation in connection with the prohibition controversy which of late seems to have aroused more interest than ever before. The gratuitous insult offered the medical profession by Clarence True Wilson, prohibition leader, while the American Medical Association was holding its annual session in Portland, Oregon, a few years ago, will not soon be forgotten, and now the attorney for the Indiana Anti-Saloon League is reported by the

newspapers as coming out openly in an unwarranted and uncalled-for attack upon the entire medical profession by insinuating that if Indiana is permitted by law to have medicinal liquor then the physicians and druggists of the state will turn bootleggers. The statement will be resented by every reputable physician in the state, and already the Indianapolis Medical Society, the largest local medical society in the state, has gone on record as adopting a resolution which reads as follows:

"In one of the Indianapolis daily papers on January 12, 1931, an interview was reported with E. A. Miles of the Anti-Saloon League. In the course of this interview Mr. Miles gave five alleged reasons against the repeal of the so-called Wright bone-dry law. As one of these reasons he is quoted as saying, 'The suggested change will introduce two new classes of bootleggers into the state—doctors and druggists.'

"If the interview is reported correctly it offers a gratuitous and uncalled-for insult to the medical profession, therefore.

"Be It Resolved, That the Indianapolis Medical Society respectfully resents the offensive statement as published, and expresses the opinion that neither honest convictions nor fanaticism should be permitted to restrict scientific judgment as to what physicians should prescribe for their patients, also,

"Be It Resolved, That in the opinion of the Indianapolis Medical Society physicians should be unhampered and unrestricted in their scientific judgment and efforts to heal the sick."

It is entirely possible and even probable that a small minority in the medical profession is conscientiously opposed to the claim that alcoholic beverages have any place as therapeutic agents in the treatment of disease, and still others in the profession while recognizing the value of alcoholic beverages as therapeutic agents are willing to be denied the use of such agents as a contribution to the prohibition cause. However, there isn't a single reputable physician in the state who will not resent the insults that repeatedly have been heaped upon the heads of physicians in general in connection with this prohibition controversy, and we believe that this "great experiment" as it has been called is losing support among a great many people as much through the misrepresentation, vilification and abuse practiced by the leaders in the prohibition movement, a large percentage of whom are ministers of the gospel and supposed to be possessed of a few of the attributes of the Lowly Nazarene, as it is losing through the actual failure of the experiment. No matter what any of us may think of prohibition or the possibilities of enforcing it, we are not disposed to look very kindly toward a movement that presumably has to be bolstered up with such unfair and abusive arguments as sometimes emanate from leaders in the movement.

WARNING TO PHYSICIANS

Most of the physicians of the state, registered under the Harrison Narcotic Law, have no doubt by this time received their warning notice relative to re-registration and payment of special tax on or before July 1 of each year.

We trust that all have given due consideration to the second paragraph and have correctly interpreted its significance. "Section 9 of the Harrison Narcotic Law provides that anyone who violates *or fails to comply with any of the above requirements* shall, on conviction, be fined not more than $2,000.00 or be imprisoned not more than five years, or both, in the discretion of the court."

The medical profession, it will be seen, under a law of the land of the free and the home of the brave, constitutes a privileged class. It is privileged to prescribe narcotics on the payment of a special tax which allows it to assume the privilege of bearing the financial burden of narcotic control; its members are given the privilege of languishing in jail, fortunately for a period of not more than five years, if by a simple error of omission they should fail to fulfill an imposed obligation on a certain date.

Perhaps the court, in its infinite mercy, might not impose the extreme penalty; perhaps inconvenience, indignity and humiliation might be the only penalty involved in a given instance; nevertheless the specific penalty is provided by law and to no one is it guaranteed that he will not suffer it if he innocently fails to fulfill the requirements.

Here, if ever there was one, is a wrong which needs to be righted. Here is an instance of legislation gone awry. A learned profession, a profession which ministers to the needs of others, a profession which has little interest in or aptitude for practical politics must suffer from discriminatory legislation of the less intelligent sort. How long must this continue?—*New England Jour. of Med.*, December 25, 1930.

WHAT PRICE PROGRESS IN MEDICINE?

No proofs or statistics are needed to show that the great progress in medicine of the last fifty years conforms to the strictest dictionary definition of progress in general, namely an advance towards ideal completeness or perfection. But progress, like most things, has to be paid for, and the wise man, even if he is a busy doctor, will pause now and then and count the cost, although the value received may seem priceless.

My theme, if indeed I have any, is—What Price Progress in Medicine? What have we sacrificed or lost as we have gradually developed the laboratory aids, the office and hospital routine, and the more scientific background of the doctor? With all the benefit that the patient today receives from the scientifically trained clinician, what help does he fail to get that the best type of an older

generation of medical men would have given him? For instance, when a patient consults a physician or surgeon, he does it for some specific reason, and to the old-time general practitioner the most important thing the patient had to tell him was why he had consulted him, and the doctor's entire energy and ability were directed to relieving that particular symptom. Are not we doctors of today so preoccupied in making our diagnoses that frequently some symptom, not significant to us but of paramount importance to the patient, is overlooked and neglected, and does not this omission frequently deliver the patient into the hands of some charlatan who is clever enough, at least, to relieve that symptom? Osler recognized this tendency when he said: "Treat the patient rather than the disease"; and Weir Mitchell makes the observation: "It is not the body but the man that is ill." Isn't it true, also, that the visit paid by the modern doctor, over-worked and over-burdened with responsibility, in time snatched from his office or hospital duties, proves often more of a strain than a comfort to the patient? We must have a little sympathy for the invalid lady who complained to her nurse one morning that she really felt too sick to see the doctor!

Furthermore, is it not inevitable that the modern routine of the doctor's office, the hospital, and the operating room, indispensable and efficient as it is, should discourage the exercise of reasoning and judgment in the individual? We know, for instance, that many nurses, who conform scrupulously to the technique in which they have been trained, could not give the logical reason for many of their routine duties and are useless if some emergency necessitates abandoning that routine. It seems that somewhere along the line of their education initiative might be developed without interfering with their technique. And, also, it seems to me most important that our medical students should come into contact not only with the scientifically trained clinician who devotes all his time to teaching but with those who are also engaged in private practice.

In the magnificent advance of scientific medicine something has been lost, something that the old fashioned family doctor had by virtue of his intuition, his rugged experience, his common sense, the necessity of developing resourcefulness, and the fact that he was an integral part of the community in which he lived, sharing its activities and interests. We cannot and would not reproduce those conditions and that environment; but we must, in all honesty and some humility, pay homage to those physicians of a bygone age who knew the art, if not the science, of medicine, and admit that with all that generation after generation has added to the store of knowledge, the truth is still to seek.—Presidential address, E. T. SMITH, M.D., Hartford Medical Society, Hartford, Conn.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

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We want THE JOURNAL to serve *you*.

IN some states bills for medical services are preferred claims, and especially if the services are rendered within twelve months preceding the decease. Why not such a law in Indiana?

OH, LORD, why can't we be saved from death, floods, famine, and last, but not least, state legislatures and like pestilences? We could stand a month every ten years, but every two years is too often!

WHEN you are asked to overlook the shortcomings of a fellow practitioner it is just as well to remember that the entire medical profession must share the brunt of criticism caused by the dereliction and incompetency of the few.

BY the middle of the month of January the Washington County Medical Society had a one hundred percent paid-up membership for 1931. Dr. Claude B. Paynter is the secretary. Here is an example for you to follow, county medical society secretaries!

IT is four months until the fishing season opens. How time drags for the medical man who gets his most enjoyable recreation in hooking the wily bass! It's all right to talk about golf—but for real recreation give us some light tackle and put us on lake or stream where the fighting bass are reasonably plentiful.

THE JOURNAL is quoted very frequently by other medical journals, and we appreciate the compliment, but before long we are going to dip the editorial pen in gall and wormwood and go after the editor who steals our editorials and editorial notes and foists them upon his readers as original with himself. We try to be scrupulously exact in giving credit where credit is due, and we expect others to follow the same practice.

WELL, income taxes may not bother many of us, but perhaps we would contribute a little more to Uncle Sam's strong box if we used better business methods in collecting that which is due us. The average doctor is a poor business man, and he

should be ashamed of himself for establishing such a reputation. He not only hurts himself, but he sets a bad example in the community.

The members of the Indiana State Medical Association should remember that the executive secretary is not only willing but anxious to be of service in the solution of all problems pertaining to the practice of medicine. Write to him concerning your troubles and let him act on the matter or put it up to the proper committee for such attention as deserved. The Association office is a clearing house for useful information. Make use of it.

The "Ten Commandments of Medical Ethics," written by the late Dr. Frank B. Wynn, of Indianapolis, and repeatedly published in this and other medical journals, ought to be hung over the desk of every regular medical practitioner in the state of Indiana. There never was a time when such wise advice has been needed as much as now. A thousand pities that some of the men of the younger generation have so little regard for the ethics and medical proprieties of the past.

Well, Indiana's "bone dry law" may not be repealed, but we do think that it could be modified to the extent of permitting licensed physicians to prescribe alcoholic beverages in case of sickness when in the judgment of the physician such treatment is indicated. We admit that any medical man can obtain alcoholic beverages in any city or town in Indiana without much difficulty, but why not make it legal for him to obtain those supplies when they are to be used for therapeutic purposes?

Often we hear the question raised as to why all of the state boards of medical registration and examination will not accept the findings or certificate of the National Board and issue a license without further requirement. This question has been answered by some states to the effect that there would be interference with the police function of the state through acceptance of the certificate of the National Board of Medical Examiners, and most states jealously guard their declared right to exercise police function.

The objections of members of the medical profession to Indiana's Bone Dry Law should not be construed as objection to the Eighteenth Amendment or the Volstead Act. The Indiana law is tyrannical and extreme, and very different from the Volstead law. By the provisions of the "Bone Dry Law" the judgment as well as the honesty of every physician is questioned. Probably a very large majority of the reputable and well-trained physicians, even though they believe in and are supporters of the Volstead Act, are not in sympathy with such tyrannical legislation.

The physician who tries to make his patient think that he knows everything pertaining to medicine and surgery, and that his judgment should be the final word, is in reality a very dangerous man, and the public sooner or later finds it out. It is a good thing for any physician to admit that there is something that he does not know, and in reality he proves to be a better man and one that is more trusted if he does make such an admission. The chap who is so smart that you can't tell him anything, and never admits that there is something that he does not know, is a good man to avoid.

The poisoning of water fowl that has resulted in the death of millions of ducks and other wild fowl in western states during the past few years has been determined definitely by the United States Bureau of Animal Industry to be due to botulism. It is supposed that the disease may attack domestic chickens, ducks and fowls. So far as we know nothing has been said about the ill effects on human beings who innocently eat either wild or domestic fowl that has been infected with botulism, though it may not be a bad idea to suggest that all fowl be thoroughly cooked before being eaten by human beings.

College Humor for November, 1930, gets off some good Christian Science propaganda in the article on "How Are You Today?" which winds up as follows: "The secret of youth is never to say anything about a pain in your stomach; never to go near a hospital except to visit the afflicted; never to let a strange surgeon look down your throat, for if you do he will howl for your tonsils; never to begin the practice of having your teeth photographed for then your days as a healthy human being are ended; and never to mention the word 'infection' to anyone over fifty years of age unless the room has several large doors and windows through which you can leap."

Recently we read in the daily press that a New York man was in a very sad plight mentally and physically through the loss of *all but twenty million dollars* of an original sixty million dollar fortune. How sad! And how perfectly tragic and pathetic it is for any man to be obliged to scrimp along on the income from twenty million dollars! Such a man certainly needs the services and sympathy of some good physician, but in all probability the poor man is unable to afford the services of a physician, or pay for any "tonics or sedatives" unless someone will loan him those generously distributed by Morris Fishbein, editor of *The Journal of the A. M. A.*

The fog deaths in Belgium stirred up a good deal of discussion all over the world, caused by the sensational and imaginary articles stimulated in the fertile brains of newspaper reporters and broadcasted in the lay press by scare headlines. Simmered down to cold facts it was found that

the sixty-four deaths that occurred were in old people primarily, and occurred in a valley that is deep and sheltered so that cold and fog settles in the bottom of such a valley. British authorities point out that during the winter every city is in danger of such a catastrophe if a combination of severe cold, fog and still air occurs over a period of several days. Such a sequence of events has occurred at various times in Great Britain.

IT is reported that a fairly busy ear specialist in one of our Indiana cities is advising patients with an acute otitis media to use hot applications to encourage the drum to rupture, and that he discredits the customary practice of incising ear drums to secure drainage. When asked why he gave such advice he is said to have remarked that during the last few years, or while patients are taking better care of middle ear troubles, mastoids have become rare and ear surgeons are losing considerable income in consequence. There is nothing like being honest and working for personal ends—even if it does spell disaster for the patient!

ALL acute lung abscesses are primarily medical, a contention supported not only by the results quoted but also by the statements of other authors that operation during the acute phase of abscess carries with it a mortality of from sixty-five to seventy percent.

Acute single lung abscesses and some chronic abscesses are usually amenable to medical treatment alone.

Radical surgery is definitely indicated only in cases in which the patient does not get well after a reasonable period of conservative "management", in peripheral abscesses that do not drain well, in long standing chronic cases, or, occasionally, in multiple abscesses limited to one lobe.—H. E. SPECTOR, *Jour. of the A. M. A.*, Sept. 13, 1930.

IN every city and town where there are a half dozen or more physicians you will find a medical "hammer and anvil club" the membership of which is composed of a few physicians in the community who make it a practice to "knock" all the other doctors in the community, and especially the ones who are the most successful. Sometimes "knocking" is due to jealousy, at other times to real or imaginary grievances, and occasionally it is due to just downright cussedness or a cultivated practice to say no good word or have no kind thoughts for any confrere. It is time for those "hammer and anvil clubs" to quit business entirely, for right now there is urgent need for cooperation and encouragement of professional friendship between medical men. We are "knocked" by the laity enough without "knocking" among ourselves.

WELFARE work no doubt accomplishes a great amount of good, but there are many heavy contributors to welfare work who are opposed to so many agencies and so much duplication of work. They also are getting thoroughly disgusted with the enormous overhead which eats up funds and makes it impossible to devote only a small percentage of the funds to real welfare work. In fact, it has been stated that some welfare organizations, not omitting those that have to do with medical services, are spending anywhere from fifty to seventy-five cents out of every dollar received, which is a bad showing. To quote Arthur Brisbane, "If twenty-five million dollars is devoted to relief work and handed down to various agencies for distribution, there usually is just about enough left for relief work to buy a couple of sandwiches."

UNDER the heading "Don't Be a Goat" the bulletin of a better business bureau warns readers concerning the inadvisability of signing bonds for friends or relatives who want to go into the peddling of patent medicines, extracts, spices, nostrums and other wares. The company securing the bond make their proposition sound very worthy to the prospective salesman until he gets the bond signed up and starts selling for a few months. They urge and cajole the salesman to sell on credit here and there all over the country until it is impossible ever to collect. Then 99 times out of 100 the bondsman is "the goat" and has to come across with from five hundred dollars to five thousand dollars, depending upon how good the salesman was at giving away the goods. Two or three of our medical friends have been "the goats" in propositions of that kind.

ONE of the principal criticisms aimed at the average medical man is that he is not sufficiently thorough, and in consequence his services too often are of the lick-and-promise variety. It is quite true that some physicians in jumping at conclusions arrive at correct diagnoses, and by the same process of reasoning are able to adopt correct treatment, but this is not generally true nor does it hold good in even a fair percentage of instances in good guessers. Patients deserve and should have skilled and comprehensive examinations so that they may be given intelligent and trustworthy advice. In reality the physician who gives service based upon careful and conscientious attention is the one that not only succeeds in the long run in acquiring all of the patrons to whom he can give satisfactory attention, but those patrons usually are quite ready to pay adequately for the service rendered.

SOMEONE always is complaining because reputable medical journals do not jump to conclusions and indorse every new theory and untried practice, especially when advocated by someone standing well in the profession. It should be remembered that every now and then an honest but misguided enthusiast proposes something that has nothing to commend it except the blind enthusiasm of its originator. What the reputable medical

journals aim to do is to accept and publish dependable statements only, and statements that contain no ambiguities. If a Mayo, Cabot, or other prominent man in the profession claims, over his own signature, to have discovered a specific or cure for any disease or abnormal condition it is entirely probable that the statement will be accompanied by proof acceptable by all, but until acceptable proof is furnished it is more than likely that there will be many skeptics, and, to use a slang phrase, those from Missouri who have to be shown.

We helped to elect President Hoover, and in his controversy with the insurgents and bolshevistically inclined senators and representatives in Congress we have felt disposed to support him for the reason that to our notion his recommendations and conclusions have been logical and, to our notion, to the best interests of the country. However, Hoover has fallen very much in our estimation since he permitted himself to be dragged forward as the sponsor for the blatant advertising physician of Iowa who claims to cure many diseases with a secret preparation, and who at all times has been the outspoken enemy of reputable educational institutions and scientific men and organizations. When President Hoover lends his indorsement to medical quackery, as he did when he pushed the electric button that sent the presses to work printing the Iowa quack's newspaper, it is time for reputable medical men to stop and consider whether Herbert Hoover's general judgment is to be trusted.

We always have greatly admired Calvin Coolidge and largely because he seemed to be actuated in speech and conduct by so much good common sense and logical reasoning. Recently we have grown to think all the more of him since he has taken such an unequivocal stand against government ownership and government support of people. No government, state, or community can thrive or its people be happy when a few are supporting the many, or when anyone gets it into his head that he must have something for nothing. We have an idea that Coolidge opposes this idea of donating medical and surgical services to the undeserving as we now do through the operation of our benevolent associations and our philanthropic physicians who donate that for which many of the recipients should pay. The system is wrong, and as Calvin Coolidge has pointed out on numerous occasions all aid is detrimental unless it helps the receiver to help himself, enables him to retain his self-respect, and keeps him from dependency.

One of our well-known Indiana physicians says: "I wonder why we do not have a course of massage in our medical schools. Is it because we have no doctors who can teach it? Somehow I feel pretty sure that if doctors had been taught the principles of massage in times past, the medical profession would not now be embarrassed by the problems which arise when certain of our patients go to the osteopath or even the chiropractor and receive what they think is good treatment." To which we might add that massage is a very valuable adjuvant in the treatment of certain conditions and it should be utilized more than it is. There is no reason why it should be considered a cure-all for every ailment under the sun, and the masseurs, good, bad and indifferent, be dignified by being presented with a license to practice medicine, even as drugless healers. While it may be true that the drugless healers are dying out and soon will pass out of the picture, the fact remains that what little good there is in their practice should be given its just place in our medical teaching.

The government is making a general survey of medicinal products on the American market and already has convicted one wholesale drug concern of misbranding tincture of digitalis, nux vomica, and other products. The government charged and proved that the nux vomica was almost twice as strong and the digitalis one-half as strong as the labels indicated. The danger to life as a direct result of misbranding such preparations as digitalis and nux vomica constitutes a valid reason for punishing any manufacturer or wholesaler who is guilty of such carelessness. The case in question also involves bromides, salicylates, and phenolphthalein, all according to the government allegation misbranded under the food and drugs act. The corporation in question previously had been prosecuted for violation of the acts. While the federal courts are making every endeavor to safeguard the nation's drugs, the physician will be wise if he prescribes drugs and pharmaceuticals that are manufactured and marketed by firms that have good reputations and have established themselves as trustworthy.

We dislike to admit it but we know there are some physicians who think they are so smart that they do not need to learn anything more. Most of such fellows are behind the times and don't know it. Anyway, there is a crying need for postgraduate work in Indiana, as in other states, which should be taken directly to the rank and file of the medical profession and in some way made so attractive and inviting that it will be accepted. There are many Indiana physicians who are well trained, experienced, and progressive. This is evidenced by the prominent part they take in local, state and national medical societies, but their success from every standpoint is due to the fact that they are everlastingly at work trying to improve and equip themselves for better and more trustworthy service. Postgraduate work in Indiana as compared to what it is in other nearby states has been neglected, but an awakening is seen in the work done by our State Medical Association, and what is promised by our Council, which latter is arranging to bring postgraduate work right to the door of every physician in the state.

IN our efforts to make every regular practitioner of medicine a member of the county medical society of the county in which he lives we have, as might be expected, admitted to membership some very undesirable physicians. Sometimes we have not known that they were so undesirable until after we took them into our medical societies. After we got them in it has been difficult or impossible to get them out. Such experiences have had a tendency to sour the dispositions of a few of the younger men who are trying to maintain the ethics and traditions of the profession, and sometimes it has resulted in societies going to the other extreme and refusing admission to men who in every way would be desirable members. There are several counties in Indiana where one or two physicians, who would be very desirable members of the local medical society, are kept out as a result of petty jealousies or personal animosities that never should be taken into consideration in judging the fitness of a man for membership in a local medical society. With the beginning of a new year there ought to be a change of tactics.

THE pope's message of recent date certainly put a crimp in the trial marriage heresy and birth control propaganda. It is said that the sexual urge has no conscience, though it is entirely probable that the pope's reasoning and advice may have some bearing in the attempt to establish right and wrong in sexual relationship. The trouble with the birth control propaganda is that it is peddled to lay persons everywhere, and it is getting so that every high school boy and girl knows all about contraceptive methods and how to use them. The *Birth Control Review* for January, 1931, says that "contraception is a medical problem, first and foremost, and that the methods generally conceded to be most satisfactory must be prescribed by a physician to suit individual needs." Perhaps if the advice were followed there would be less criticism from religious and medical professions, but when complete and detailed information concerning contraceptive measures is given out to all who seek such information, as we have been told is the fact at some birth control clinics, then it is time to condemn all this birth control propaganda that is being so widely disseminated and tends to aid sexual immorality.

THE Chicago Public Health Institute, sponsored and financed by Julius Rosenwald, still excites controversy in the medical as well as the lay press, and the Chicago Medical Society is wrestling with the ethical problem caused by the action of several well-known Chicago physicians and surgeons in identifying themselves with the Institute and who offer no explanations or apologies for doing so. The Chicago Medical Society through its chairman of public relations committee has informed the physicians in question that their conduct arouses increasing restlessness and resentment of the medical profession as a direct result of continued association with the Public Health Institute. The erring physicians are informed that the very existence of the Public Health Institute is injurious to the public, to the profession of medicine, and especially to physicians who are officially connected with the Institute, since not only is a lay corporation practicing medicine but also is following methods of practice that are definitely open to question. The outcome of the controversy, which in reality is of national interest, is followed with keen interest by medical men all over the country who, no doubt, earnestly hope that the recommendations of the medical profession will prevail.

THE Indiana State Board of Medical Registration and Examination has canceled its reciprocity agreement with Illinois, and for reasons fully explained in a letter from the Indiana Board published in this number of THE JOURNAL. The rumpus started through a demand on the part of the Illinois Board that Indiana licentiates must take a bedside or clinical examination before being licensed to practice in Illinois. Inasmuch as no such requirement exists in this state it was thought that discrimination was practiced, and as Illinois fixed its ruling the reciprocity agreement is rescinded. In reality this breach will work a greater hardship upon Illinois, for the records show that there are far more Illinois medical graduates trying to get into Indiana than there are Indiana graduates trying to get into Illinois. It seems to us that this whole question of reciprocity ought to be settled in some amicable way so that well-qualified medical men can have some chance of entering any state for the practice of medicine through reciprocity. Another thing that should receive some attention is an effort to prevent quacks and medical pretenders from practicing medicine without being licensed, and they are not all Christian Scientists or so-called drugless healers either.

A JEWELER desiring to get away from the heavy outlay required in carrying a large stock of goods, and to cut down on overhead expenses, started a small shop in an office building in one of our Indiana cities and developed his business through selling from catalogs. He soon established a large trade among discriminating people who discovered that any article sold in the local stores could be duplicated at a saving of from twenty to twenty-five percent of the cost. He developed a cash business, based on small profits, a minimum overhead, and practically no capital invested in stock. The idea struck us as being applicable to the purchase of surgical instruments and other supplies required by physicians. Why not organize for cooperative buying? It is a well-known fact that physicians and surgeons are charged fabulous prices for everything that they use in professional work, and the worst feature of all is that some physicians are unmercifully swindled through the specious claims of some salesmen that a special

price is being offered when in reality it is quality of goods and not price that should be taken into consideration. Furthermore, despite the fact that many physicians use supplies in large quantities, the prices oftentimes are retail prices such as charged to the lay consumer who buys in small quantities only. Strangely enough, physicians seldom organize for their own protection, so again we say that it is time for medical men to pay some attention to economic problems as they pertain to the practice of medicine.

A SUBSCRIBER, commenting upon the cost of medical care, says that the cost of medical attention in itself is the least of the expense, and he calls attention to some of the superfluous expenses which go with hospitalization. He says: "From a strictly commercial standpoint the hospital occupies a virtual monopoly. Competition does not influence business methods and as a result hospitals do as they please. I almost have made up my mind that the people like that sort of thing, and while they do a good deal of kicking they will not, as a rule, cooperate in the interests of economy when sickness is involved. I have tried repeatedly to get patients not to employ special nurses following operations in the hospital. I am sure that not more than ten percent need special nursing services in their care. This alone more than doubles their hospital expenses, and yet they insist upon such service. Recently I operated a woman and spent considerable time in trying to convince the husband that he should not employ a special nurse for his wife. I made inquiries and found that on the floor where my patient was confined there were twenty-five patients, seventeen of whom had special nurses, so that there were only eight patients for the floor nurses. In spite of my advice the husband, at the end of twenty-four hours, called a special nurse and there was not the slightest need for it. The facts are that the public is demanding the most expensive luxuries in their hospital service, and are yelling their heads off when they have to pay the bill. It is very much a question in my mind whether or not the public is not as much responsible for the high cost of medical care as anybody else."

To Indiana belongs the distinction of being the first state to have a follow-up conference along the lines outlined by the Whitehouse Conference on Child Health and Welfare that is being sponsored by President Hoover. The session began Thursday, January 15th, with a talk by Dr. Morris Fishbein, editor of the *Jour. of the A. M. A.*, and was followed with three lengthy sessions on Friday and two on Saturday. The session was sponsored by Governor Leslie and gave every appearance of being a great success. Large crowds were present at the various meetings. Particularly noteworthy was the dinner meeting Friday evening, at which Governor Leslie was present along with fully 700 other persons prominent in Indiana. We do not seem to recall a more interested and interesting group.

Apparently every organization in the state is vying with every other to express its willingness to cooperate in solving the health problems of childhood. The medical profession was well represented in that Dr. A. B. Graham, president of the Indiana State Medical Association, presided at the Thursday night meeting at which Doctor Fishbein spoke. The Friday morning meeting was under the leadership of Dr. F. S. Crockett, president-elect of the Indiana State Medical Association, and every one of the six papers was on a medical subject and presented by a medical man. Furthermore, the meeting was under the leadership of Doctors King and Schweitzer of the Indiana State Board of Health. This, we believe, was as it should be, because it must be apparent to everyone that the medical profession has been outstanding in its interest in the child. We believe that the State of Indiana has distinguished itself in being the first to follow up the Washington conference and in doing it so well.

AFTER more than eighteen months of careful consideration of many questions having to do with the enforcement of prohibition, the Wickersham Commission on January 20 presented to the President of the United States its report on this subject. Although disagreeing radically on many other phases of the subject, the commission was unanimous in its decisions concerning the relationship of the medical profession to the prescribing of alcohol and of alcoholic liquors for the treatment of disease. Indeed, it recommended unanimously the removal of the causes of irritation and resentment on the part of the medical profession resulting from the enforcement of the Volstead Law in its interpretation of the Eighteenth Amendment. The commission listed three main objects to be achieved so far as the medical profession is concerned in this legislation: (*a*) Doing away with the statutory fixing of the amount which may be prescribed and the number of prescriptions; (*b*) abolition of the requirements specifying the ailment for which liquor is prescribed on the blank which goes into the public files, and (*c*) leaving as much as possible to regulations rather than fixing details by statute. These are the principles for which the medical profession has fought ever since prohibition became the law of the nation. They represent a recognition by the commission of the fact that the practice of medicine is the duty of the medical profession and not the privilege of Congress. They recognize the age-old principle that it is within the province of the physician licensed to practice by the state to prescribe for his patient anything which he feels is for the good of the patient and in such quantities as he feels are necessary in order to secure certain effects. The Wickersham Commission will have the gratitude of the medical profession for its logical con-

sideration of these subjects.—*Jour. A. M. A.*, Jan. 24, 1931.

WE know that we are inviting a regular barrage of high-powered explosives from certain dentists and public health workers when we say anything in condemnation of the ubiquitous tooth brush, but just the same we are going to express the opinion that the tooth brush *as ordinarily used* causes more trouble than it prevents. We may be entirely wrong in our conclusions, but we are of the opinion that never in the history of the world were there so many people suffering from pyorrhea and decayed teeth, and never were there so many young people wearing so-called "store teeth", above and below, and for several years it has been a question in the minds of many physicians as to whether or not the ubiquitous tooth brush has been causing more infection than it prevented, thus leading to the sad results mentioned. Mouth hygiene certainly is not only desirable and necessary but it is a question if mouth hygiene requires the kind of scrubbing and digging around that the average dentist and public health worker recommends through the use of stiff tooth brushes. We recently heard an old person with a splendid set of natural teeth declare that he never had used a tooth brush, but all his life had rinsed his teeth carefully after every meal with some mild detergent solution, followed by massaging of the gums with the ball of the finger. He declared that occasionally a blunt tooth pick was required to remove small particles of food, and once a day, at night upon retiring, the mouth is rinsed thoroughly with peroxide of hydrogen. It may be that what is good for the goose may not be good for the gander, but judging from observation and a report of experiences of patients we are strongly convinced that brushing around the gums with a stiff tooth brush, as recommended by many dentists, is the cause of much trauma and with it the introduction of infection to the soft tissues about the teeth. Now, rise up, all you tooth scrubbing dentists and tooth brush manufacturers, and fire your shrapnel, but we will die with colors flying!

WHAT's in a name? Many things. Money, for instance, if the name happens to be that of a patented or trade-marked proprietary medicinal. Rummaging through some old files of the *A. M. A. Bulletin* we encountered the following illuminating comparative table:

PROPRIETARY	
Phenacetin	$ .63 oz.
Aspirin-Bayer	.85 oz.
Veronal	3.00 oz.
Atophan	2.75 oz.
Duotal	1.07 oz.
Urotropin	.60 oz.
Trional-Winthrop	1.90 oz.
Sulfonal-Winthrop	1.70 oz.
Diuretin	1.85 oz.
Aristol	1.80 oz.
Total	$16.15

NON-PROPRIETARY	
Acetphenetidin	$ .27 oz.
Acetylsalicylic acid	.15 oz.
Barbital	.70 oz.
Cinchophen	.60 oz.
Guaiacol carbonate	.30 oz.
Hexamethylenamine	.17 oz.
Sulphonethylmethane	.46 oz.
Sulphonemethane	.36 oz.
Theobromine sodium salicylate	.37 oz.
Thymol iodide	.72 oz.
Total	$ 4.10

The total cost of an ounce of these substances under a protected name is $16.15.

The total cost of an ounce of each of these substances under an unprotected name is $4.10.

The cost of the proprietary name to the consumer is $12.05!

So, what's in a name? Well, according to the above, just about 300 percent additional profit! Which is a mighty good reason why physicians should always prescribe drugs under their nonproprietary, pharmaceutical name.—*Del. State Med. Jour.*, Nov. 1930.

ONE of the most prominent and highly respected physicians in the state, who long has been a pillar in one of the churches and whose integrity and morality never has been questioned, has written us concerning the medicinal beverage controversy as follows: "The medical profession is perfectly right in demanding scientific freedom in prescribing. Physicians should not be hampered in prescribing for the sick, even if an occasional physician does abuse the privilege. All laws are violated by some people whenever they think they can escape the penalty. The Wright Bone-dry Law of Indiana is absolutely unfair and unreasonable. Every physician of wide experience knows that a considerable proportion of cases of pneumonia and very many cases of depression and exhaustion from various infective diseases, particularly during the convalescent period, are greatly benefited by the wise administration of whiskey or brandy. The Wright Bone-dry Law makes the physician a criminal if he prescribes whiskey, even though he honestly believes that his patient's life, or at least his immediate benefit, may depend thereon. It is almost as much as a man's reputation is worth to criticize publicly anything the prohibitionists do, as they are sure to make it as uncomfortable for him as they can. I formerly was an annual subscriber to the Anti-Saloon League because I believed that many of its purposes were wise and right. When the Wright Bone-dry Law was proposed I declined to contribute another penny to the Anti-Saloon League if they were going to persist in trying to secure

the passage of a law which would prevent a physician doing what he thought was right and necessary for his patients. I promptly received a telephone call from an officer of the League in which he berated me for a lack of interest in promoting prohibition that would be absolute, but I told him that I was a physician and that I also tried to be a good citizen and therefore felt that the passage of such a law would be outrageous and in consequence I would not give another penny to the Anti-Saloon League, and I have not done so in the several years since the law was passed."

There are many who agree with us that unless something is done and done quickly to head it off we will have socialized medicine in the United States within the next few years. There are many doctors who will howl their heads off if socialized medicine does come, but then it will be too late. A united and militant medical profession can prevent a catastrophe that will be ruinous to profession and public alike. The public is being misled through the dissemination of propaganda inspired by blind enthusiasts who have not considered the possibilities for great harm. If the medical man who is asleep at the present time desires to know what socialized medicine will do to him, he should read "The Doctor in Soviet Russia" as published in *The Nation* for September, 1930. In this article one brilliant Soviet physician complained bitterly as follows: "How can we do our best work when we must go from our laboratory to small, poorly heated, dingy quarters? Even our laboratory animals are better housed than we. To be sure our living conditions are better than in the early days of the revolution, yet still our rooms are overcrowded, and we must share our kitchens with four or five other families. It is true that we receive enough money from the state to frugally support ourselves and our families, but a man needs more than bare support. He needs a place that he can call his own. He needs to see his family decently clothed. He needs to be free from the 'eternal system'." Commenting on this condition of affairs the author says, "What is the significance to the American medical profession of the status of our profession in Russia? The vision of great medical leaders reduced to poverty and submission is naturally discomforting, and our reaction to the socialization of medicine is likely to be one of rebellious opposition, yet blind opposition will avail us little. It behooves the members of the medical profession to consider the trend of public opinion. Unless we can be satisfied to do away with personal initiative, competition and reward, we must do something to stem the tide that is approaching, for there is a very strong tendency to make the practice of medicine the business of the state, and the benefit to the public, if there be such, will be at the expense of private practice."

Not a few of the lay publications of the country, and particularly the newspapers, are guilty of publishing items or articles of supposed scientific interest which have not received the approval of trustworthy authorities. Often these quasi-scientific articles are merely cleverly disguised advertising for some individual or some aggregation of individuals. As an example of some of the piffle that newspapers publish with a pretense of giving out valuable scientific information we note a report emanating from an optometrist, who erroneously is designated as a doctor, thus carrying the impression that he is a medical man, who is reported by the newspapers to have attended the last meeting of the Indiana Association of Optometrists and to have discussed "the new technique of diagnosing disease by the eyes. * * * This technique involves color tests of the field of vision of the patient. Diet defects, general conditions of fatigue, kidney and heart ailments and toxic poisonings are some of the conditions which can be revealed by noting the reactions of the eyes to the primary colors. Types of ailment indicated affect various nerves, which in turn produce certain known and recognizable defects and limitations in the patient's field of vision. Spots in the eye which are blind to each primary color are mapped on a chart of the retina of the eye, giving a picture of the field of vision. From this picture nerves impairing vision are spotted and attention is then turned to those organic functions which lead to the defective action of that nerve."

It is, of course, quite possible, even probable, that this is a clever bit of advertising to draw trade, and yet it is published as pure reading matter under glaring headlines which state that "Dr. ———— (optometrist) Tells of New Technique of Diagnosing Diseases." Such articles are most pernicious in their effect, and for the reason that they not only give false theories but create false impressions as to the ability of a non-medical man to diagnose disease. Of course we realize that there are any number of spectacle fitters, better known as optometrists or opticians, who do not hesitate to make an attempt to diagnose disease conditions of the eye and to suggest or even prescribe treatment, but the newspapers ought to be in better business than feathering the nests of such individuals, and if Better Business Bureaus really want to do something worth while in protecting the "deer peepul" from being imposed upon, they might start with some of the medical pretenders.

In discussing the nursing problem and the action of the Chicago Medical Society and the Illinois State Medical Association in asking for a let-up in theoretical training for nurses and a modification of requirements for nurses so that they will get more practical training in shorter time than that required of registered nurses, Dr. E. H. Ochsner in the November *Illinois Medical Journal* says that a two-year course for all applicants, with proper variation of work, is quite sufficient to produce a well-trained and efficient nurse for a large percentage of cases requiring nursing

care, and that a third-year postgraduate course could be provided for such nurses as desire an extra year and who show special adaptability in any of the nursing specialties. The present tendency on the part of nursing schools is to magnify the importance of theoretical instruction and nursing fads and to relatively at least undervalue and belittle the importance of every-day practical work. To prove the inconsistency of some of the theoretical instruction given nurses, the author says that recently he made an investigation at one of the best training schools in the city of Chicago and found that the senior nurses were getting six lectures a week when three would have been quite sufficient. The lecturer on surgery devoted the greater part of an hour to a differential diagnosis between gallstones and appendicitis and the indications for operation, while another devoted considerable time to a differential diagnosis between carcinoma and sarcoma. Ochsner says that such lectures are a waste of time, and even worse than a waste of time from the standpoint of a nurse's training because they have a tendency to make a nurse less efficient inasmuch as the important function of a nurse is to observe symptoms outwardly and to so record or report them. If she has preconceived notions about diagnosis her report is more likely to be colored and distorted and perhaps incorrect than if she simply is taught to observe carefully and report accurately what transpires during the interval between the surgeon's visits. The lecturers sometimes say that they give all this technical information because the nurses have to have it in order to pass the Board's examination, and as an evidence of what the Board can demand, one of the questions in a recent examination was: "Describe the fœtal circulation." Doctor Ochsner says, "Does anyone with a particle of sense believe that a knowledge of the circulation of the unborn babe is essential to good nursing or that such knowledge makes a nurse more efficient?"

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP

ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

INDIANAPOLIS

Question: What is the law in Indiana in regard to the handling of narcotics?

Answer: The state government, as well as the federal government, has legislated upon the handling of narcotics. In 1905 the following law was enacted in Indiana:

"It shall be unlawful for any druggist or druggist's clerk to sell, barter, trade or give any opium, morphine or cocaine to any person addicted to the habitual use of opium, morphine or cocaine, unless such person secures a written prescription therefor from a licensed physician. Any person violating any provision of this section shall, on conviction, be fined for each separate offense in any sum not less than ten dollars nor more than fifty dollars." —SECTION 2762, BURNS 1926.

In 1911 the state passed another act dealing with the same subject, which act was amended in 1913. The act as amended reads as follows:

"It shall be unlawful for any person except a registered pharmacist, to retail, sell or give away any cocaine, alpha or beta eucaine, opium, morphine or heroin, cannibis indica, or any salt or any compound or derivative of any of the foregoing substances, or any preparation or compound containing any of the foregoing substances, or any of their salts or compounds or derivatives, and they only upon the written prescription of a duly registered physician, licensed veterinarian, or licensed dentist; and it shall be unlawful for any duly registered physician, licensed veterinarian or licensed dentist to write, issue, deliver or dictate, either directly or indirectly, any prescription to or for any habitual user of any drugs enumerated in this section; every prescription shall contain the name and address of the person for whom prescribed, and the date the same shall have been filled, and shall be permanently retained on file by the person, firm or corporation where the same shall have been filled; and it shall be filled but once, and no copy of it shall be taken by any person, except a copy may be taken by the board of pharmacy, or their agents, and the original shall at all times be open to the inspection of the prescriber, to the Indiana board of pharmacy, or their agents, and all officers of the law; except, however, that such cocaine, alpha or beta eucaine, opium, morphine, heroin, or any salt, or any compound, or any derivative of the foregoing substances, or any of their salts or compounds or derivatives may be lawfully sold at wholesale by a wholesale jobber or manufacturer upon the written order of a licensed pharmacist, duly registered practicing physician, licensed veterinarian, or licensed dentist; and Provided, That the wholesaler, jobber or manufacturer shall affix, or cause to be affixed, to the bottle, box, vessel or package containing the article sold, and upon the outside wrapper of the package, as originally put up, a label distinctly displaying the name and quantity of cocaine, alpha or beta eucaine, opium, morphine, heroin, or any salt or compound, or derivative of any of the foregoing substances, sold, and the word "poison" with the name and place of business of the seller, all printed in red ink: and Provided, also, That, the wholesaler, jobber or manufacturer shall, before delivering any of the articles, make or cause to be made in a book kept for that purpose, an entry of the sale thereof, stating the date of sale, the quantity, name and form in which sold, the name and address of the purchaser, and the name of the person by whom the entry is made; and said book shall be always open for inspection by the members of the state board of pharmacy, or agents thereof, and the proper officers of the law, and said book shall be preserved for five years after the date of the last entry therein: and Provided, further, That all persons selling or dealing in cocaine, alpha and beta eucaine, opium, morphine, heroin or any salt or any compound or any derivative of the foregoing substances, either at wholesale or retail, shall once each month, at a time to be designated by the Indiana board of pharmacy, prepare and mail to the secretary of the Indiana board of pharmacy, on blanks to be prepared by such board, a report of all sales of cocaine, alpha and beta eucaine, opium, morphine, heroin, and any salt or any compound or any derivative of the foregoing substances, made during the thirty days preceding such report, and the dates of such sales, the amount sold and the name of the person to whom such sales were made: Provided, also, That nothing in this act shall apply to any preparation, patent or proprietary, containing not more than two (2) grains of opium, or one-fourth of a grain of its alkaloidal salts or their derivatives to the ounce, or admixtures of ipecac and opium commonly known as 'dover's powders', liniments, suppositories, ointments and plasters, plainly labeled 'For external use only': Provided, also, That nothing in this act shall be construed to prevent the legitimate administering of said drugs, their salts, compounds and derivatives by a duly

registered practicing physician, duly licensed veterinarian or duly licensed dentist."—SECTION 2763, BURNS 1926.

"Any person violating any of the provisions of the foregoing section, on the first offense, shall be guilty of a misdemeanor and, on conviction, shall be fined not less than twenty-five dollars ($25.00) nor more than five hundred dollars ($500.00), and imprisoned in the county jail not less than ninety (90) days, nor more than one year; and for each succeeding offense, he shall be guilty of a felony and shall be fined not less than two hundred dollars ($200.00), nor more than one thousand dollars ($1,000.00), and imprisoned in the state prison or reformatory not less than one year nor more than eight years, and if the person so offending shall have a license as a physician, veterinarian, dentist or pharmacist, such license shall be revoked by the court trying said cause: and it shall be the duty of the prosecuting attorney of the county where such offense is committed to prosecute all persons violating provisions of this act, upon proper complaint being made, and, upon failure of such prosecuting attorney to act, it shall be the duty of the attorney-general of the state of Indiana to prosecute any person violating the provisions of section one of this act. It shall be the duty of the Indiana board of pharmacy to enforce the provisions of this act and to adopt such rules and regulations as it may deem best to carry out the provisions of this act."—SECTION 2764, BURNS 1926.

In 1927 another act was passed professing by its title to amend Section 2763, but inasmuch as the act itself does not purport to amend any section the act might be held invalid because the amending act does not correspond to the title. That act reads as follows:

"It shall be unlawful for any person, except a registered pharmacist, to retail, sell or give away any cocaine, alpha or beta eucaine, opium, morphine or heroin or any salt or any compound or derivative of any of the foregoing substances, or any preparation or compound containing any of the foregoing substances, or any of their salts or compounds or derivatives, and they only upon the written prescription of a duly registered physician, licensed veterinarian or licensed dentist; and it shall be unlawful for any duly registered physician, licensed veterinarian or licensed dentist to write, issue, deliver or dictate either directly or indirectly any prescription to or for any habitual user of any drugs enumerated in this section; every prescription shall contain the name and address of the person for whom prescribed, and the date the same shall have been filled, and shall be permanently retained on file by the person, firm or corporation where the same shall have been filled; and it shall be filled but once, and no copy of it shall be taken by any person, except a copy may be taken by any board of pharmacy, or their agents, and the original shall at all times be open to the inspection of the prescriber, to the Indiana Board of Pharmacy or their agents, and all officers of the law; except, however, that such cocaine, alpha or beta eucaine, opium, morphine, heroin, or any salt, or any compound, or any derivative of the foregoing substances, or any of their salts or compounds or derivatives, may be lawfully sold at wholesale by a wholesale jobber or manufacturer upon the written order of a licensed pharmacist, duly registered, practicing physician, licensed veterinarian, or licensed dentist: and, Provided, That the wholesaler, jobber or manufacturer, shall affix or cause to be affixed to the bottle, box, vessel or package containing the article sold, and upon the outside wrapper of the package, as originally put up, a label distinctly displaying the name and quantity of cocaine, alpha or beta eucaine, opium, morphine, heroin, or any salt or compound or derivative of any of the foregoing substances, sold, and the word 'poison' with the name and place of business of the seller, all printed in red ink; and, Provided, also, That the wholesaler, jobber or manufacturer shall, before delivering any of the articles, make or cause to be made in a book kept for that purpose, an entry of the sale thereof stating the date of sale, the quantity, name and form in which sold, the name and address of the purchaser, and the name of the person by whom the entry is made: and the said book shall be always open for the inspection by the members of the State Board of Pharmacy or agents thereof, and the proper officers of the law, and said book shall be preserved for five years after date of the last entry therein: and, Provided, also, That nothing in this act shall apply to any preparation, patent, or proprietary containing not more than two (2) grains of opium, or one-fourth of a grain of its alkaloidal salts or their derivatives to the ounce, or admixtures of ipecac and opium commonly known as dover's powders, liniments, suppositories, ointments and plasters, plainly labeled 'For external use only': Provided, also, That nothing in this act shall be construed to prevent the legitimate administering of said drugs, their salts, compounds and derivatives by a duly registered practicing physician, duly licensed veterinarian or duly licensed dentist."—SECTION 2763, BURNS 1929 SUPPLEMENT.

In 1929 the following law was enacted:

"It shall be unlawful for any person except a registered pharmacist, duly licensed physician, podiatrist, veterinarian or dentist to have any cannabis sativa and indica in his possession at any time except upon the written prescription of a duly licensed physician, podiatrist or dentist or veterinarian or when such drug has been dispensed by such physician, podiatrist, veterinarian or dentist. Any person who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not exceeding two hundred and fifty dollars to which may be added imprisonment for not more than one hundred eighty days. This act shall not be construed to apply to wholesalers, jobbers or dealers who sell or deal in cannabis sativa and indica and who have otherwise complied with the provisions of the law regulating the sale of cannabis sativa and indica."—SECTION 2763.1, BURNS 1929 SUPPLEMENT.

The enforcement of these laws is left to the law-enforcing functions of the state generally, but with a special obligation placed upon the Indiana Board of Pharmacy. Section 2 of the act creating that board provides, among other things, that—

"It shall direct prosecutions and see to the enforcement of the provisions of this act, or any other act pertaining to the sale of cocaine, alpha or beta eucaine, opium, morphine or heroin, or any salt or any compound or derivative of any of the foregoing substances, or any preparation or compound containing any of the foregoing substances or any of their salts or compounds or derivatives."—SECTION 13835, BURNS 1926.

In addition to the foregoing statutes, of course, there are the Federal Narcotic Laws, copies of which, together with the regulations of the Internal Revenue Department adopted under them, are available to all physicians upon their request to the Bureau of Internal Revenue, Narcotic Division, Washington, D. C.

DEATH NOTES

DUDLEY M. CULVER, M.D., of Muncie, died December 25th, aged seventy-six years. Doctor Culver graduated from the Indiana Medical College, Indianapolis, in 1874.

SAMUEL MCGAUGHEY, M.D., of Indianapolis, died suddenly January 10th. Doctor McGaughey was fifty-five years of age. He was a graduate

of the Medical College of Indiana, Indianapolis, in 1900.

WILLIAM F. WALSH, M.D., of Indianapolis, died January 5th, aged forty-nine years. Doctor Walsh was a graduate of the Indiana Medical College, School of Medicine of Purdue University, in 1907.

HENRY A. SUTTON, M.D., of Marion, died January 19th, aged eighty-four years. Doctor Sutton practiced medicine in Marion for forty years. He was a graduate of the Curtis Physio-Medical Institute, Marion, in 1897.

JOHN J. FICK, M.D., of Indianapolis, died January 1st, aged thirty years. Death followed a prolonged attack of hiccoughing. Doctor Fick graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1926.

GRANT CHANEY, M.D., of Portland, died at a hospital in Rochester, New York, December 23rd. He graduated from the Medical College of Ohio, Cincinnati, in 1896, and was a member of the Jay County Medical Society, the Indiana State Medical Association and the American Medical Association.

CLAUDE E. QUINN, M.D., of Terre Haute, died January 2nd, aged forty-nine years. Doctor Quinn graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1909. He was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association.

GRANT C. MARKLE, M.D., of Winchester, died January 16th, aged sixty-two years. Doctor Markle's car was struck by a train and the injuries resulted in his death a short time afterward. Doctor Markle graduated from the University of Louisville School of Medicine in 1892. He was a member of the Randolph County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

DR. HARRY ELLIOTT, of Brazil, has returned from Rochester, Minnesota, where he underwent surgical treatment.

DR. M. A. AUSTIN, of Anderson, recently attended a meeting of the American Society for the Control of Cancer, in New York City.

THE Greene County Medical Society met at Linton, Indiana, January 15th. Case reports were presented by several of the members. Dues were collected for 1931.

THE Elkhart County Medical Society held its regular meeting at Elkhart, January 8th. Dr. Robert S. McGaughey, of Danville, presented a paper on "Colitis".

DR. THURMAN B. RICE, of Indianapolis, spoke before the Teachers' Federation, at Indianapolis, on February 5th when his subject was "New Things in Bacteriology."

THE Vanderburgh County Medical Society met at the Welborn Hospital Clinic, Evansville, January 13th. Papers were presented by Drs. C. L. Seitz, W. L. Smith and J. Y. Welborn.

Two new members have been added to the membership list of the Clay County Medical Society. They are Dr. James F. Maurer and Dr. John C. Shattuck, both recently located in Brazil.

THE January 8th meeting of the Tippecanoe County Medical Society was held at the Home Hospital, Lafayette. Dr. Edwin M. Kime, of Indianapolis, spoke on "Electro-therapeutics".

DR. MORRIS FISHBEIN, editor of the *Journal of the American Medical Association,* was the opening speaker at the State Child Health and Welfare Conference held in Indianapolis in January.

THE Perry County Medical Society met at Tell City, December 30th. Officers were elected for 1931. Dr. W. H. Muelchi, of Tell City, was made president, and Dr. D. S. Conner, of Cannelton, secretary.

MRS. D. O. KEARBY, of Indianapolis, has been made State Chairman of Press and Publicity for the Woman's Auxiliary to the Indiana State Medical Association, to work in cooperation with the National Auxiliary.

THE St. Joseph County Medical Society held a meeting at South Bend, January 7th. A paper on "Postoperative Pulmonary Complications" was presented by Dr. Frederick A. Coller, of the University of Michigan.

THE Clinton County Medical Society held its regular meeting at the Coulter Hotel, Frankfort, January 8th. Dr. F. M. Gastineau, of Indianapolis, presented a paper on "Some Important Problems in Skin Diseases."

THE Wayne-Union County Medical Society met at the Richmond Leland Hotel, Richmond, January 15th. Dr. R. N. Harger, of Indiana University School of Medicine, presented a paper on "Alcohol from the Medico-Legal Standpoint."

The January meeting of the Madison County Medical Society was held at Anderson, January 20th. The guest speaker was Dr. J. C. Vaughan, of Marion, who related some of his travel experiences. The Woman's Auxiliary was invited to attend this meeting.

The Hendricks County Medical Society met at Crawley Hall, Danville, Indiana, January 23rd. Dr. A. M. Mendenhall, of Indianapolis, presented a paper on "Some Newer Things in Obstetrics." Fourteen members attended the meeting, which followed a chicken dinner.

The January 15th meeting of the Cass County Medical Society was held at Logansport. Drs. W. W. Holmes, F. W. Terflinger and Earl Palmer presented addresses on meningitis, and reported three cases. Dr. E. L. Hedde talked about leukocytosis in non-inflammatory conditions.

The Gibson County Medical Society met at the Methodist Hospital, Princeton, January 12th. "Acute Rheumatic Fever" was the title of a paper presented by Dr. B. C. Gwaltney, of Francisco. The society voted unanimously in favor of Doctor King's bill for full-time public health officers.

The United States Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer in general medicine and surgery. Applications will be rated as received by the Commission at Washington, D. C., until June 30, 1931.

The Vanderburgh County Medical Society recently circulated the first issue of its monthly bulletin. The official slogan of the bulletin is "One Hundred Percent Cooperation" of the members of the Vanderburgh County Medical Society. The bulletin is an interesting one and deserves support.

The January 9th meeting of the Howard County Medical Society was held in Kokomo. Dr. A. B. Graham, of Indianapolis, presented a paper on "Anorectal Diseases" and Dr. R. H. Moser, of Indianapolis, presented a paper on "Cardiospasm". The meeting was a dinner meeting, with an attendance of twenty.

Examination of candidates for commission as assistant surgeon in the regular corps of the U. S. Public Health Service will be held at Washington, D. C., March 9, 1931. Request for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

The Floyd County Medical Society held a meeting at the Public Library in New Albany, January 9th. Dr. D. F. Davis presented a paper on "Prostatitis". Two reels of moving pictures were shown, one concerning the influence of drugs on intestinal motility, and one concerning emergency operations on liver and bladder.

The LaPorte County Medical Society met at LaPorte, January 22nd. Dr. F. V. Martin, of Michigan City, was the principal speaker. Case reports were presented with a discussion of three cases of subacute bacterial endocarditis. A new constitution and by-laws for the LaPorte County Medical Society was discussed and adopted.

The Northeastern Indiana Academy of Medicine held its regular meeting at the Gawthrop Hotel, Kendallville, January 29th. Dr. John A. Wolfer, of Chicago, presented a paper on "Diagnosis and Treatment of Cancer of the Rectum and Sigmoid." A representative of Parke, Davis & Company gave a moving picture demonstration of biological products.

The annual congress on medical education, medical licensure and hospitals, held under the auspices of the American Medical Association, will convene at the Palmer House, Chicago, February 16, 17 and 18, 1931. Dr. Charles P. Emerson, of Indianapolis, and Dr. Burton D. Myers, of Bloomington, will present papers during the session.

Officers of the Woman's Auxiliary of the Indianapolis Medical Society, elected recently, are: Mrs. William F. Clevenger, president; Mrs. L. A. Ensminger, first vice-president; Mrs. J. E. Holman, recording secretary; Mrs. William E. Gabe, treasurer; Mrs. Daniel Layman, corresponding secretary; and Mrs. Harold Ochsner, publicity.

The United States Civil Service Commission announces open competitive examination for physiotherapy aide, applications for which position must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than March 10, 1931. Examination is to fill vacancies in the Veterans' Administration and in the Public Health Service. Information concerning this examination may be obtained from the U. S. Civil Service Commission, Washington, D. C.

The first meeting of the Clay County Medical Society for 1931 was held early in January. New officers were selected as follows: Dr. Clinton C. Sourwine, president; Dr. Louis C. Rentschler, Clay City, vice-president, and Dr. John C. Shattuck, secretary-treasurer. The former board of censors, Drs. Harry Elliott, P. H. Veach and Frederick Nussel, were continued. The position of medical historian, vacant since the death of Doctor Thornton, was given to Dr. George Finley, of Brazil.

THE Woman's Auxiliary to the Indianapolis Medical Society advised Representative Louis Ludlow of its unanimous vote to use its influence against passage of the Jones-Cooper Bill, and urged Representative Ludlow to use his influence to defeat its passage. The state secretary, Mrs. William S. Tomlin, also sent a request to each county auxiliary president, asking that similar action be taken in the county auxiliary societies. Representative Ludlow replied to the members of the Indianapolis Auxiliary, saying that he was glad to have their views, which would receive his utmost consideration.

DR. ADOLF MEYER, professor of psychiatry of Johns Hopkins University, has been chosen to receive the first award under the recently established Thomas W. Salmon Memorial. Award was made by a committee appointed by the New York Academy of Medicine to survey the field and select the outstanding contributor to scientific advance in mental medicine. Doctor Meyer was selected in recognition of his services to psychiatry and mental hygiene over a period of years. The award carries with it an honorarium of $2,500 and the recipient will give the Thomas W. Salmon Lectures during 1931.

OFFICERS for the Benton County Medical Society for 1931 are: Dr. C. W. Akenson, of Boswell, president; Dr. Ward Smith, of Otterbein, legislative committee; and Dr. V. L. Turley, Fowler, secretary-treasurer. Doctor Turley reports that the society has been most active during the past year. The school work program has been extended into eight of the eleven townships of the county. A part of the county infirmary farm has been converted into a tuberculosis ward and hospital rooms for sick patients, which work was made possible through donations from various organizations and the county tuberculosis society, with no actual expense to the county. All of this work was under the supervision of the medical society.

THE United States Civil Service Commission announces that it is in need of eligibles to fill medical positions as follows: Acting assistant surgeon, U. S. Public Health Service, Galveston, Texas, $3,800 per year; acting assistant surgeon qualified in trachoma work, U. S. Public Health Service, Ellis Island, New York, $3,000 per year; acting assistant surgeons for work in pathology, U. S. Public Health Service, Ellis Island, New York, $3,600 per year; medical officer qualified in neuropsychiatry, Veterans' Bureau, San Francisco, California, $3,800 per year. Full information may be obtained by addressing the United States Civil Service Commission, Washington, D. C.

THE American Association for the Study of Goiter again offers an award of three hundred dollars for the best essay based upon original research work on any phase of goiter presented at their annual meeting in Kansas City, Missouri, April 7th, 8th, and 9th, 1931. Competing manuscripts must be in the hands of the corresponding secretary, J. R. Yung, M.D., of Terre Haute, not later than April 1, 1931, to permit the award committees sufficient time to examine all data. Manuscripts arriving after this date will be held for the next year or returned at the author's request. First award of the 1930 annual meeting held in Seattle was given Dr. William Reinhoff, Jr., of Johns Hopkins University, Baltimore. Drs. O. P. Kimball, of Cleveland; E. P. and D. R. McCullagh, of Cleveland, and Dr. Robert P. Ball, of the University of Louisville, received honorable mention.

THE fifteenth annual clinical session of the American College of Physicians will convene in Baltimore, Maryland, March 23rd to 27th, and in Washington, D. C., March 28, 1931. The session is held in Baltimore through invitation of the Johns Hopkins School of Medicine, the University of Maryland School of Medicine, and the Medical and Chirurgical Faculty of the State of Maryland, the Baltimore City Medical Society and others. An additional day will be spent in Washington, where a special program of clinics and inspection tours has been arranged, under the auspices of the medical departments of the U. S. Army, U. S. Navy, U. S. Public Health Service and Georgetown University. Hotel headquarters will be at the Lord Baltimore Hotel. General headquarters will be The Alcazar, Cathedral and Madison Streets, Baltimore. Further information and programs may be obtained by writing Mr. E. R. Loveland, 133 South 36th Street, Philadelphia, Pennsylvania.

APPOINTMENT of twenty-six interns to serve in the City Hospital, Indianapolis, in 1931 and 1931, was announced by Dr. Herman G. Morgan, secretary of the Board of Public Health of Indianapolis. Those appointed are: J. E. Gillespie, Wabash; C. P. McLaughlin, Vincent J. Noone, Indianapolis; W. L. Sharp, Greenwood; J. A. Schram, Bloomington; R. J. Spivey, Thorntown; E. B. Lamb, Amboy; Mathew Cornacchione, Indianapolis; J. R. LaVanchy, Indianapolis; Bennett Kraft, Indianapolis; C. B. Southard, Lebanon; G. L. Jones, Indianapolis; W. C. Callaghan, New Albany; Frank Fustenburg, Indianapolis; Donald Reed, Culver; G. J. Hunt, Indianapolis; P. C. F. Vietzke, Indianapolis; C. H. Kaufman, Blue Island, Illinois; G. S. Row, Osgood; J. R. Jackson, Belzone, Mississippi; S. W. Leonard, Louisville, Kentucky; G. L. Sandy, Martinsville; E. C. Taylor, Lafontaine; Dillon Geiger, Bloomington; Harry Covell, Angola, and M. L. Ruth, Indianapolis.

IN addition to the articles already enumerated the following have been accepted by the Council

on Pharmacy and Chemistry of the American Medical Association:

Cutter Laboratory:
- Oak Pollen Extract-Cutter; Western Ragweed Pollen Extract-Cutter; Western Water Hemp Pollen Extract-Cutter.

Gane & Ingram, Inc.:
- Ephedrine Hydrochloride.
- Ephedrine Sulphate.

Lederle Laboratories, Inc.:
- Diphtheria Toxoid, ten immunization treatment packages.
- Diphtheria Toxoid, fifteen immunization treatment packages.
- Tetanus-Gas Gangrene Antitoxin (Lederle).
- Gas Gangrene Antitoxin (Polyvalent) Refined and Concentrated without Tetanus Antitoxin (Lederle).

Mead, Johnson & Co.:
- Mead's 10 D Cod Liver Oil with Viosterol.

National Drug Co.:
- Diphtheria Toxin-Antitoxin Mixture (Diphtheria Prophylactic) one hundred and fifty 1 cc. vial packages.
- Diphtheria Toxoid, five (three-dose) immunization treatment packages.
- Diphtheria Toxoid, fifty (three-dose) immunization treatment packages.
- Diphtheria Toxoid, one (two-dose immunization treatment packages.
- Diphtheria Toxoid, five (two-dose) immunization treatment packages.
- Diphtheria Toxoid, ten (two-dose) immunization treatment package.
- Diphtheria Toxoid, fifteen (two-dose) immunization treatment packages.
- Diphtheria Toxoid, fifty (two-dose) immunization treatment packages.
- Schick Test.
- Schick Test Control.
- Tuberculin Old (Human).

Parke, Davis & Co.:
- Parke, Davis & Co.'s Viosterol in Oil 250 D.
- Parke-Davis Cod-Liver Oil with Viosterol 10 D.

Winthrop Chemical Co., Inc.:
- Winthrop Viosterol in Oil 250 D.

INDIANA UNIVERSITY NEWS NOTES

INDIANA University's second semester opened Monday, February 2nd, with registration. Enrollment in classes took place Tuesday, February 3rd, and regular classroom work got under way Wednesday.

GEOFFREY BRANAMAN, twenty-year-old sophomore at Indiana University, died of anemia at the Cass County Hospital, Logansport, January 8th. Branaman was taking pre-medic work at the University.

FRANK COBLE, Richmond, has been elected president of the Phi Chi professional medical fraternity at the Indiana University School of Medicine at Bloomington. Gustave Peters, Frankfort, was elected vice-president and Vernon Pancost, Elkhart, secretary-treasurer.

JUNE 17th has been announced as the opening date for the 42nd annual summer session of Indiana University. Work will be offered in the College of Arts and Sciences, Graduate School, School of Education, School of Medicine (both Bloomington and Indianapolis), School of Finance and Commerce, School of Music, and School of Law.

DR. E. T. THOMPSON, administrator of the Indiana University School of Medicine and Hospitals at Indianapolis, has been appointed a member of the committee on autopsies of the American Hospital Association. Dr. Maurice Dubin, of the Mt. Sinai Hospital, Chicago, Illinois, is chairman of the committee. Other members are Dr. E. M. Bluestone, Montefiore Hospital, New York; Dr. A. C. Backmeyer, Cincinnati General Hospital, and Dr. U. P. Colwell, American Medical Association, Chicago.

ACCORDING to figures announced by Dr. E. T. Thompson, administrator of the Indiana University hospitals at Indianapolis, a total of 2,156 different patients were served by the three I. U. hospitals during the month of December as compared with 1,631 in December of 1929. The records show that the three state hospitals, the Riley, Coleman and Long, cared for 684 patients who were confined to the hospitals and 1,472 "out-patients".

The Riley hospital led in total number of patients with 783. The Coleman hospital came second with 762, while the Robert W. Long hospital had 611 patients. The Coleman hospital led in the number of bed patients with 265. The Riley hospital had 225 and the Long hospital 194. The Riley hospital had 558 out-patients, the Coleman 497 and the Long 417.

The daily patient average for the three hospitals was 363.91 as compared with 314.34 for December, 1929. The daily patient average for the Riley hospital was 161.09, that of the Coleman 104.02, and the Long hospital 98.80.

A COURSE of six lectures on child welfare laws is being given by the Indiana University department of training for social work at Indianapolis. The lectures began January 22nd. The course, which is offered at the request of the Child Welfare Committee of the Indianapolis League of Women Voters, is given under the auspices of the I. U. extension division, 122 East Michigan Street. The lectures are scheduled as follows: January 22nd, an outline of the child welfare problems, Prof. R. Clyde White, Indiana University;

January 29th, laws of special importance to public school social service, Mr. W. A. Hacker, assistant superintendent, Indianapolis public schools; February 5th, laws of special importance to the children's department of the Indiana Board of State Charities, Leroy M. Millikan, state agent of the Board of State Charities; February 13th, laws relating to the Board of Children's Guardians, Maurice E. Tennant, attorney for the Marion County Board of Children's Guardians; February 19th, child welfare laws in other states, Prof. Charles R. Metzger, Indiana University; February 26th, federal laws affecting child welfare, Prof. C. R. Metzger.

WITH a view to developing improved vision of nursing problems, a system has been worked out between Mrs. Ethel P. Clarke, director of the Indiana University Training School for Nurses, Indianapolis, and Miss Helen I. Benne, director of the University of Wisconsin School of Nursing. The plan calls for the exchange of the two assistant head nurses, one from each school, for a six months' period.

Miss Hatte Traube, of Madison, Wisconsin, is the Wisconsin University nurse who assumed her duties the first of the year at the Riley Hospital, Indianapolis. Miss Traube will be given varied services at the Riley with special emphasis on the work of the orthopedic ward "K", which is the Kiwanis unit of the hospital.

Miss Josephine Doup, the Indiana University exchange nurse, is from Columbus, Indiana. She has gone to Madison. She will be given service in the Wisconsin University Hospital corresponding to the type given Miss Traube at the Riley. A special orthopedic ward of the Wisconsin University hospital is to be opened next spring and Miss Doup will be given work there as soon as the new wing is open.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

December 23, 1930.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held December 16th read, corrected and approved.

The release, "Uncle Sam as Nursemaid," read and the secretary was instructed to make suitable changes and submit it again to the Bureau before it was released for publication January 10, 1931.

Radio release, December 27th, "Periodic Health Examination—the Best New Year's Gift."

Report on medical meetings:

Dec. 9—Hanover College, Hanover, Indiana: "Taking the Guess Work out of Medicine." 300 students and faculty present.

Dec. 9—Hanover High School, Hanover, Indiana: "Keeping Fit." 150 present.

Dec. 9—Madison Rotary Club, Madison, Indiana: "The New Attitude Toward Disease." 40 present.

Dec. 9—Hanover Parent-Teacher Association, Hanover, Indiana: "Sex Education." 100 present.

Meeting to be held:

Jan. 5—Rush County Medical Society, Rushville, Indiana: Speaker obtained.

The Bureau received clipping from the *South Bend Tribune* of December 17th which states under the headline, "Dr. H. B. Boram is not member, says he never indicated he was on the Wickersham Commission." The question as to Doctor Boram's status with the Wickersham Commission was brought forward by the Bureau based on articles that appeared in the *South Bend Tribune* on November 11th and the *South Bend News-Times* on November 12th. These articles indicated that Doctor Boram had an official connection with the Commission. Doctor Boram, according to records on file at the headquarters, is not a member of the St. Joseph County or the Indiana State Medical Association.

A member of the Bureau who was instructed to prepare an article in favor of vivisection presented this article to the Bureau. This article was to form a basis for a future release. This member of the Bureau reported that he had written to the University of Buffalo for an article by Dr. Matthew D. Mann on "Vivisection" which was published about twenty years ago and is considered yet today as authoritative upon the subject.

Letter received from *The Dental Roster* which was referred to the dean of the Indiana University Dental School.

The Bureau reviewed the preliminary draft of the full-time health officer questionnaire which is to be sent to the secretaries of the State Medical Association.

The Bureau reviewed editorials that appeared in the *Indianapolis News* and the *Indianapolis Star* in regard to the Jones-Cooper bill which is now being considered by Congress.

The secretary was instructed to send these editorials to the editor of THE JOURNAL. The secretary also was instructed to write to the Congressman asking him for information in regard to the present status of the Jones bill. The secretary was instructed to send the following telegram from the Bureau of Publicity to the Indiana Senators and the Congressman for the Seventh District voicing the opinion of the medical profession of Indiana in regard to the Jones-Cooper bill:

"The medical profession of Indiana is aroused and is militant in its opposition to the Jones-Cooper Senate Bill 255. Experience has proved the folly of such legislation. Every service proposed by the bill is amply and faithfully rendered in Indiana already and chiefly by the medical profession. You are appealed to to vigorously oppose this paternalistic and uncalled-for legislation."

The following bill was approved for payment:

T. B. Rice, M.D. $15.70

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 30, 1930.

December 31, 1930.

Meeting called to order at 3:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held December 23rd read, corrected and approved.

The release, "Uncle Sam as Nursemaid," reread and officially approved for publication January 10, 1931.

Radio release: The Executive Committee of the Indiana Child Health and Protection Conference asked for Bureau of Publicity hour on the radio for the next two weeks. Request granted provided exact copy of broadcast is submitted to Bureau before it is made.

The following requests for speakers were received;

Oct. 13, 1931—Hamilton County Medical Society, Sheridan, Indiana: "Significance of Heart Sounds." Speaker assigned.

Nov. 10, 1931—Hamilton County Medical Society, Arcadia, Indiana. Speaker assigned.

Answer received from one of the industrial clinics in Indiana to which was referred letter from the National Bureau of Economic Research. For text of letter from National Bureau of Economic Research see minutes of the meeting of the Bureau of Publicity on December 16th. The industrial clinic's answer follows:

"It has been the policy of this clinic at all times not to have any contract form whatsoever relative to industrial accidents nor do we operate upon any schedule of fees.

"The only work which we do which might be called contract is the examination of prospective employes and this is done upon a fixed fee depending upon the type of examination required by the employer.

"It is our opinion that any contract work is upon the wrong basis not only from the viewpoint of the doctor himself but that of the employer and employe as well. It is our opinion that the best type of work done is that in which there is no contract basis unless it be perhaps where some physician or surgeon is a full-time employe of an organization."

The secretary was instructed to answer the letter of the National Bureau of Economic Research, stating that so far as can be found out there is no contract practice in Indiana along the lines discussed by ethical clinics or physicians.

The following letter was received from McCready Huston, editor of the *South Bend News-Times,* South Bend, Indiana:

"I have your communication of December 11 concerning Dr. H. B. Boram. The news stories to which you evidently refer came out of Atlanta, were bona fide as far as we were able to tell, and we see no reason for making this newspaper a vehicle for an attack on a citizen here against whom we have no knowledge.

"If the Medical Association has a quarrel with Doctor Boram it seems to me it should prosecute it itself.

"Unless I have further and satisfactory reason for printing your letter I shall withhold it. If we do print it we shall have to make a news story of the whole incident.

"Certainly Mr. Wickersham has not disclaimed the connection to us. You should be able to see that you are asking a newspaper to do something contrary to newspaper ethics."

This letter was received from Mr. Huston as a result of a request by the Bureau of Publicity that the *South Bend Tribune* and the *South Bend News-Times* correct an impression that might have been received as a result of articles they published which intimated that H. B. Boram had an official connection with the Wickersham Commission. The letter from the Bureau of Publicity which Mr. Huston objects to print is as follows:

"Several articles that have appeared recently in the South Bend newspapers regarding the work that Dr. H. B. Boram claims to have done for the Wickersham Crime Commission have come to the attention of the Bureau of Publicity of the Indiana State Medical Association. A letter from the Bureau was addressed to Congressman Louis Ludlow asking whether said H. B. Boram has any official connection with the Wickersham Commission. Upon inquiry Mr. Ludlow received the following letter from George W. Wickersham, chairman of the Commission:

'Replying to your letter of the 24th instant, I beg to say that I do not know Dr. H. B. Boram, to whom you refer. Dr. Guild did offer to the Commission certain information which he possessed and offered to make certain investigations on his own account the results of which he would furnish to this Commission. The Commission secured for him access to one of the penitentiaries, and this is the extent of the official connection between this gentleman and the Commission. This Commission, of course, is delighted to receive any information which may be helpful in connection with its studies, but by agreeing to do so it does not establish any official status of the person furnishing the information.'

"We are asking you to print this letter along with our statement in order to correct any mistaken impression that might have been gained that Dr. Boram has any official connection with the Wickersham Commission."

This letter was printed, as requested, by the *South Bend Tribune* along with a denial by Doctor Boram that he had any official connection with the Commission. The secretary was instructed to send the following letter to Mr. Huston in answer to his letter of December 12:

"The delay in answering your letter of December 12 concerning Dr. Boram is due to the fact that the Bureau of Publicity of the Indiana State Medical Association has not been able to consider it officially until the meeting today.

"Our letter to you in regard to the intimation that Dr. Boram had an official connection with the Wickersham Crime Commission was based upon the article which appeared in the *South Bend News-Times* of November 12 under the heading, 'Local Physician Completes Wickersham Crime Report.'

"Frankly, the members of the Bureau were very much surprised at the attitude taken by you in this matter. So far as the Bureau of Publicity of the Indiana State Medical Association is concerned, there is no quarrel with Dr. Boram. In fact, none of the members of the Bureau of Publicity has any personal acquaintanceship with Dr. Boram. The Bureau, however, is charged with giving correct information in regard to medical matters of interest to the laity and necessarily is very much interested in any publicity which intimates that a physician is a member of such a nationally prominent group as the Wickersham Crime Commission when, as a matter of fact, this physician has no official connection with the Commission as far as the Bureau is able to find out. It is upon this basis that the Bureau wrote you on December 11 asking that you print our letter in your paper which would correct any misleading intimation that may have been gathered from your article of November 12."

Further reports upon facts concerning vivisection are to be made by one member of the Bureau at a future meeting of the Bureau.

The following report was made by a member of the Bureau upon the survey of the Fact Finding Commission appointed by the governor to study the tuberculosis situation in the state:

"The report of the Indiana Tuberculosis Commission is approved by the Bureau of Publicity of the Indiana State Medical Association as offering the ultimate sanatoria facilities desired in Indiana. It is noted that the southern half of the state is particularly in need of relief and it is recommended that sanatoria facilities be first provided there."

Report approved by the Bureau.

Program received upon the Indiana Conference on Child Health and Protection to be held in Indianapolis, January 15, 16 and 17. Suggestions concerning this program are to be made at the next meeting of the Bureau.

Letter received asking that releases be sent to a number of educators and health teachers in Carroll county. The Bureau instructed the secretary to place these names upon the mailing list.

A copy of *The Hoosier Motorist* containing a rupture cure advertisement brought to the attention of the Bureau. The Bureau instructed the secretary to write the Hoosier Motor Club that such advertisements are, in the opinion of the medical profession, very reprehensible and as a number of physicians are members of the Hoosier Motor Club the Bureau of Publicity takes this occasion to protest against the continued publication of such advertisements.

Public Health Service pamphlet received upon "Whole-time County Health Officers."

A letter was sent to all county society legislative committees asking county medical societies to protest against the enactment of the Jones-Cooper bill, which would in effect re-enact the Sheppard-Towner law.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 7, 1931.

January 7, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held December 31, 1930, read and approved.

The release upon Louis Pasteur read and approved for publication.

The radio time for January 3rd and January 10th was given to the Executive Committee of the Indiana Child Health and Protection Conference. This request was granted upon the provision that exact copy of the broadcast be submitted to the Bureau before broadcasts are made.

A letter was received from the Wayne County Medical Society of Detroit, Michigan, in regard to the debate upon "State Medicine" that are being held by colleges in Michigan, Ohio, and Indiana. The secretary was instructed to answer this letter.

One hundred and fifty-four questionnaires were sent out to the hospitals of Indiana along the lines determined by the Publicity Bureau at its meeting on November 18th. One hundred and six questionnaires have been received. The secretary was instructed to work out a table with headings so that the results of these questionnaires could be obtained at a glance.

Questionnaires on the full-time health officer as approved in the minutes of December 16th were distributed to the secretaries of the various component state medical associations.

The following suggestions have been made concerning points that should be considered in regard to the health of the child at the coming state conference on child health and protection:

1. Value of annual examination of children by family physician.
2. Vaccination against smallpox should be compulsory before starting school, and should be done by family physician.
3. Vaccination against diphtheria should be done before age three by family physician.
4. A uniform state pure milk law should be enacted.

This was merely a partial list and was to be augmented after further study at a later date.

The following bill was approved for payment:

Central Press Clipping Service $5.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 20, 1931.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, JANUARY, 1931

Morbidity reports from the health officers of the state show a marked increase over the previous month, except typhoid fever. Washington and Wells counties sent in negative reports and Brown did not report. There were 474 negative report cards sent in this month. Scarlet fever is the most prevalent disease. The prevalence of diseases as indicated by the reports is shown below by the name and number of diseases from the urban and rural population as follows:

Diseases	*Total Reported*	*Urban*	*Rural*
Tuberculosis	331	212	119
Chickenpox	676	577	99
Measles	1253	678	575
Scarlet fever	1559	703	856
Smallpox	495	340	155
Typhoid fever	7	3	4
Whooping cough	236	164	72
Diphtheria	257	148	109
Influenza	169	23	146
Pneumonia	33	5	28
Mumps	61	43	18
Poliomyelitis	4	2	2
Meningococcus meningitis	53	34	19
Undulant fever	2	1	1
Tularemia	3	0	3
Septic sore throat	6	2	4
Tetanus	1	0	1

Scarlet fever increased 783 cases over last month. 772 cases were reported for January last year. 89 counties in the state reported cases and 297 cases occurred in Indianapolis. In the last ten years this month has reported the greatest number of cases.

Measles ranks second in prevalency for the current month. 543 cases the previous month. The corresponding month the preceding year, 312 cases were reported. Counties reporting the greatest number of cases are as follows: Allen, 124; Clinton, 155; Tippecanoe, 146, and Vanderburgh, 121.

Smallpox shows an increase over last month when 242 cases were reported. In January, 1930, 889 cases were reported.

Typhoid fever made a decline. 24 cases last month. There were eight cases for last year. The following cities reported cases: Elkhart, Gary and Logansport, one case each, respectively.

Diphtheria. 203 cases were reported last month, showing an increase for the present month. 125 cases the same month the preceding year. The estimated expectancy was 260. The estimate is based on the experience of the last seven years.

Poliomyelitis. Slight increase, two cases last month. Four counties reported cases—Bartholomew, Dearborn, Fountain and Marion, one case each, respectively. Only one case was reported for same month last year.

Meningococcus meningitis. There was an outbreak of the disease in Perry county during the month, sixteen cases being reported. Seven of these cases were in Tell City and nine in Cannelton. A thorough investigation was made under the supervision of the division. Cases also occurred in the following counties: Delaware, one; Elkhart, two; Grant, one; Hamilton, one; Lake, seven; Madison, one; Marion, twelve; Parke, two; Putnam, three; Spencer, one; St. Joseph, two; Vanderburgh, one; Vermilion, Vigo and Wayne, one case each, respectively. There were 20 and 88 cases reported for last month and last year.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

VANDERBURGH COUNTY MEDICAL SOCIETY

Evansville, Indiana, December 15, 1930.

The regular monthly meeting of the Vanderburgh County Medical Society was held December 9, 1930, at the Public Health Center, Evansville.

The following officers were elected for the current year:

President—Dr. I. C. Barclay.

Vice-president—Dr. H. L. Stanton.

Secretary-Treasurer—Dr. Keith T. Meyer.

Delegate to the State Medical Meeting—Dr. L. E. Fritsch.

Censors—Dr. G. C. Johnson, Dr. R. W. Viehe, Dr. W. R. Davidson.

January 17, 1931.

The regular monthly meeting of the Vanderburgh County Medical Society was held Tuesday, January 13, 1931, at the Welborn Hospital Clinic.

The following program was presented:
"The Treatment of Cancer of the Uterus"—
Radium.....Dr. C. L. Seitz
X-ray.....Dr. W. L. Smith
Surgery.....Dr. J. Y. Welborn
Following the meeting refreshments were served. A number of physicians from surrounding counties attended the meeting.

The society is considering the possibilities of presenting a weekly medical talk of interest to the lay public by various members of the society over the local radio station, WGBF.

The society is publishing a one-page monthly bulletin to be sent only to the members of the society. It is hoped that one hundred percent co-operation can be obtained in various projects undertaken by the society by means of this bulletin.

Respectfully yours,
KEITH T. MEYER, M.D.,
Secretary.

FORT WAYNE MEDICAL SOCIETY

The Fort Wayne Medical Society held its regular meeting at the Lutheran Hospital, December 16, 1930, at 8:15 p. m.

The minutes of the previous meeting were not read.

The program presentation consisted of a very interesting group of case reports with patients and specimens, thereby emphasizing the clinical aspect as urged by our president.

(1) Doctor Cornell showed the case of a female, forty years of age, who had lacerated her finger, then dressed a rabbit and following this showed a tularemia infection. Discussed by Doctors Rhamy and Duemling.

(2) Doctor Duemling presented a case of a male thirty-five years of age who had a chronic eczema of the hands beginning some twelve years ago. Yearly for a period of seven years he had received x-ray treatment on the backs of the hands and about three years ago developed an ulcer which had not healed. The examination, especially of the right hand, showed atrophy, pigmentation, telangectasis, ulceration, longitudinal striation of the nails and contraction deformities. Discussed by Doctors Gilpin, VanBuskirk, Buckner and Hall. Doctor Buckner called attention to the fact that treatment of eczema by x-ray called for very small doses. Doctor VanBuskirk emphasized the importance of the frequent check on x-ray machinery by the ionization chamber to determine the output. Doctor Hall asked the question whether or not anyone was aware of the operation of a trichon system in Fort Wayne, as the deleterious effects of this treatment after a year are rather pronounced.

(3) Doctor Rossitter presented three cases:

1. A chronic lymphatic leukemia, white cell count had ranged from 129,000 to 762,000. Patient died of a gangrenous stomatitis with which terminal infection the enlarged spleen rapidly subsided.

2. Second case that of an acute appendicitis with general peritonitis and a leukopenia, and a sub-normal temperature. The patient lived one week after operation.

3. That of a female who had an infection not unlike "flu". There was a rapid decline of the cell content of the blood, the red cells 1,500,000, the white blood cells 900, and the hemoglobin forty percent. There was a preponderance of mononuclears and at autopsy streptococci found in the blood. The diagnosis of infectious mononucleosis or agranulo-cytosis was made. These cases were discussed by Doctors Murdock, Rhamy, VanBuskirk, Carlo, and Worley. Doctor Rhamy presented the more or less arbitrary standards upon which such a diagnosis could be made and indicated that an angina should have been present to start with. Hence he was inclined to call this an "aplastic anemia".

(4) Doctor Dyar, Lutheran Hospital interne, presented an unusually well-studied case of spleno-myelogenous leukemia. This patient had had a severe gastric hemorrhage several years ago and the diagnosis at that time of Bantis disease was made. Autopsy reports indicated the diagnosis, spleno-myelogenous leukemia.

(5) Dr. L. W. Elston presented two cases:

1. A specimen of a carcinoma of the cecum in a female seventy-one years of age who was experiencing a temporary recovery from a rather formidable operation in August of this year.

2. The second case was that of a female with bilateral carcinoma of the ovaries. Discussed by Doctors Hane, Worley, Rothschild and Rhamy.

(6) Doctor Short presented three cases:

1. A perinephritic abscess following a crop of boils.

2. Sarcoma of the bladder in a child eleven months of age.

3. A secondary infected hemangioma in the bladder in a male fifty-seven years of age. Discussed by Doctor Sparks.

Following the meeting refreshments were served.

Forty-one members and six guests present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building, December 23, 1930, at 8:15 p. m.

The minutes of the two previous meetings were read and approved.

The scientific part of the program consisted of a presentation of two cases of psoriasis by Dr. H. J. Miller. The cases showed the two extremes seen in this condition. Discussion by Doctors Duemling, Gilpin, Harshman and Worley.

The society was honored and pleased by Dr. Juan Rodriguez's narration, description and pictures of his recent 7,000-mile air trip to Porto Rico and return. On this trip Doctor Rodriguez, who is a major on the medical corps, was a guest of Maj. Gen. Wm. G. Everson, Chief of Militia Bureau at Washington, D. C. The doctor's predicaments were very ably and humorously described. His apparent unconsciousness concerning several hazards which were encountered is further proof that ignorance is bliss.

The next feature of the evening, which was interesting to all and pleasant to one, was the drawing of a beautiful bag presented by the Wayne Pharmacal Supply Company. Dr. Walter Kruse held the lucky number.

At the adjournment of this meeting a rising vote of thanks was given Doctor Rodriguez and the business of 1930 was closed.

Forty-four members, two guests, present.

The Fort Wayne Medical Society held its regular meeting at the Shrine Club Rooms at 6:30 p. m. January 6, 1931.

The minutes of the previous meeting were not read.

The paper of the evening was given by Dr. John Alexander, of the department of surgery of Michigan University. The subject was "Thoracic Surgery".

Intrathoracic surgery, infant of the specialties, had its beginning in about 1902, with the use of a (Sauerbruck) vacuum room in which was maintained a negative pressure of from 6 to 9 min. of mercury. In modern intrathoracic surgery the same end is now attained by the use of positive pressure maintained inside the lung by a snugly fitting gas mask.

After this brief introduction, a series of lantern slides, of x-ray films, drawings, photographs and statistical tables were presented, illustrating the value, technique, indications and end results in some of the surgical procedures in the more common intra-thoracic diseases and conditions.

The chief conditions discussed and illustrated were:

1. Suture of wounds of pleura and lung—as for stopping hæmorrhage in traumatic cases. Technique illustrated by lantern slides.
2. Foreign bodies in lungs which cannot be removed by bronchoscopy.
3. Intrathoracic neoplasms.

4. Funnel breast, congenital and traumatic, of such severity as to cause symptoms—illustrated.
5. Non-tuberculous suppuration of the lungs. The various possible procedures which can be used were listed as follows:
   (a) Sanitarium regime.
   (b) Postural drainage.
   (c) Bronchoscopic aspiration.
   (d) Removal of foreign bodies.
   (e) Arsenicals intravenously.
   (f) Iodized oil intrabronchially.
   (g) Elimination of sinusitis.
   (h) Phrenicectomy.
   (i) Artificial pneumothorax.
   (j) Incision and drainage.
   (k) Extra-pleural pneumolysis.
   (l) Extra-pleural thoracoplasty.
   (m) Cautery lobectomy.
   (n) Exteriorization lobectomy.

In the discussion of this group:

6. It was brought out that the less radical measures should be tried first; also the value of lipiodol injections especially in determining the extent of bronchiectasis. Emphasis was also placed on the necessity for adequate protective adhesions before opening for external drainage. Lobectomy was advocated for especially severe cases when everything fails. (Actual case demonstrated by slides.)
7. Oesophageal diverticulum—early diagnosis and differentiation from carcinoma by the Bavarian meal was stressed. These cases are successfully operated.
8. Surgical heart conditions:
   (a) Drainage of pericardial emphysema.
   (b) Division of adhesions in adhesive pericarditis.
   (c) The method and feasibility of dividing the mitral value in mitral stenosis was discussed at some length. Experimental work is now being done on dogs, and Cutter's case was reviewed in which this operation was actually performed on a human, the patient surviving for five years—the actual division of the valve demonstrated at autopsy.
9. Emphema—acute, emphasized that time should be allowed for walling off of the empyema by film adhesions; meanwhile one of two procedures available:
   (a) Aspiration daily while adhesions are forming.
   (b) Closed intercostal drainage.
   Many of the subacute and all the chronic empemata require open operation. The determination of the lower limit of the empyema by progressive aspiration, and institution of drainage at that point was emphasized as a necessity for permanent cure, and conversely failure to do this is a reason for many failures. Avoidance of chronic empyema was stressed and illustrative cases shown of orthopedic defects in children resulting from such cases.
10. Pulmonary Tuberculosis—A variety of possible procedures were listed as follows:
    (a) Sanitarium regime.
    (b) Local rest-sand bags, etc.
    (c) Induced pneumothorax.
    (d) Multiple intercostal neurectomy.
    (e) Intrapleural pneumolysis.
    (f) Phrenic nerve interruption.
        A. Temporary.
        B. Permanent.
    (g) Extra pleural pneumolysis.
    (h) Extra pleural thoracoplasty.

The growing importance of surgical procedures in pulmonary tuberculosis was discussed, with special stress on phrenic nerve interruption for a variety of conditions, and paravertebral thoracoplasty for the more advanced tuberculous lesions. The essayist has recently used extrapleural pneumolysis with the introduction of especially prepared paraffin for collapsing apical cavities.

Discussion by Doctors Bruggeman, Drayer, Caylor (Bluffton), Wright.

The Fort Wayne Medical Society held its regular meeting January 13, 1931, at the Wayne Pharmacal Building at 8:15 p. m.

The minutes of the two previous meetings were read and approved.

Doctor Truelove reported a case of spleno-myelogenous leukemia which was admitted to the hospital in October, 1930, for bleeding from tooth extraction. The white blood count was over 400,000. After deep x-ray treatment the patient's blood count has been reduced to 21,000. Discussion by Doctors Drayer and Edlavitch.

Doctor Rothschild reported the case of a female who had had recurrent attacks of pain in the abdomen calling for a diagnosis of appendicitis. A very short time after the last attack of pain, while the surgeon was deliberating about operating, measles developed and the abdominal pain disappeared at this attack.

The scientific paper of the evening was given by Dr. Arthur F. Hall, Jr., on the subject, "What Is Sufficient Treatment in Syphilis?" The subject matter presented for consideration was given under the following headings:

(1) What Is Sufficient Prophylaxis Treatment?
   A. During exposure.
   B. Up to ten hours after exposure.
   C. From ten hours to three weeks.
(2) Wassermann Negative Primary Syphilis:
   Reports were given concerning the Schulze method and methods used in London and Moore and Kemp's findings at Hopkins.
(3) Wassermann Positive Primary Syphilis.
(4) Latent Syphilis.
(5) Wassermann Fast Syphilis.
(6) Active Tertiary Syphilis.
(7) Syphilis in Pregnant Women.
(8) Congenital Syphilis.

In all of the procedures reviewed by the essayist there was found to be no uniformity of opinion; however, emphasis was made upon plenty of treatment in the early cases over a rather extended period of time with frequent examinations after treatments were closed. In the cases which have had their syphilis for a long time and been without treatment, emphasis was stressed on the danger of over-treating these individuals, especially by using the arsenicals. Discussion was opened by Dr. W. W. Duemling, who mentioned five important factors in the treatment of any case of syphilis:

(1) Age of the disease.
(2) Age of the patient.
(3) Weight and musculature of the patient; the dose being from .1 to .15 grams of arsphenamine per 25 pounds of body weight.
(4) Social status of the patient.
(5) Coincident disease in the patient.

Discussion was continued by Doctors Bower, Worley, Miller, Salon, Sparks, Cornell, Rhamy, Zehr, Weaver, Harshman, Buckner, and Rothschild.

Doctor Savage brought up the matter concerning the Wright Bone Dry Law and its limitations concerning physicians.

Doctor Shinaberry made a motion that the Fort Wayne Medical Society go on record as opposed to that portion of the Wright Bone Dry Law which prohibits doctors from prescribing alcoholic beverages for medicinal purposes. Motion was seconded by Doctor Rhamy. Discussion by Doctors Cornell, Savage, Salon, Rawles, and Rothschild. During Doctor Rothschild's discussion Doctor Weaver occupied the chair. Motion carried.

Doctor Harshman referred to a bill which will be presented in the Legislature wherein examining physicians will be asked to certify as to the advisability of sterilizing feeble-minded individuals who are being committed to the feeble-minded schools. Doctor Weaver moved that the secretary be instructed to frame a resolution concerning this matter which resolution could be brought before the society at the following meeting. Motion seconded and carried.

Forty-five members and two guests present.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building January 20, 1931, at 8:15 p. m.

The minutes of the previous meeting were read and accepted.

The scientific paper of the evening, "A Dependable Test for the Diagnosis of Pregnancy," was given by Dr. B. W. Rhamy.

I. History: All other tests have been found wanting. Endocrine studies have revealed the influence of hormones of the ovary and the pituitary on sex organs. In pregnancy Erdheim and Strumme observed marked changes in the histology of the anterior lobe of the pituitary gland. Evans and Long, also Smith and Engle, found that injections of anterior pituitary substance into mice caused marked ovarian changes. Aschheim and Zondek discovered that during pregnancy there was a striking over-production of the hormone of the anterior lobe of the pituitary gland, which over-production was excreted in large amounts in the urine. By injecting this urine in immature virginal female mice striking alterations were found in the uterus, tubes, ovaries and vagina. There was swelling, hæmorrhage, premature maturation of the ovarian follicles, all visible to the naked eye. Estrus was also produced.

II. Technique: Originally .3 c.c. of fresh filtered morning urine was injected subcutaneously in mice on three consecutive days. Twenty-four hours following the last injection the mice were autopsied and histologic studies made of the sex organs. The present technique is to inject 5 c.c. of urine intravenously into rabbits.

III. Reactions:

A. Enlarged follicles with ovaries congested and swollen. Older pregnancies cause congestion of the uterus and tubes.

B. Hæmorrhagic and ruptured follicles with discharge of ova.

C. Histology of A and B plus *corpus lutea.*

IV. In pregnant women the tests have proved to be 98.8 percent accurate. In non-pregnant women the observations have proved about the same percentage of accuracy.

V. Points of Medical and Surgical Importance:

1. Urine may be toxic to the animals.
2. Urine may be contaminated.
3. Positive reactions may be due to hydatid mole or chorio epithelioma. In hydatid mole, urine has ten times as much hormone as in pregnancy.
4. In tubal pregnancy test may be positive if fœtus is alive, but negative if fœtus has been dead ten days.
5. Test may be positive six to eight days after abortion.
6. In case of an expelled hydatid mole, a negative test followed by a positive one should suspect chorio-epithelioma.
7. Test of value in amennorrhea.
8. Positive test eight days or more following labor, suspect pathology.

VI. Specimens of mice and rabbit sex organs were presented. Lantern slides were also given. Case reports by the essayist were summarized.

The paper was discussed by Doctors Taylor, Burns, Catlett, Worley, Hane and Weaver. Doctor Weaver made a motion, which was seconded and carried, to the effect that the secretary communicate with the Scientific Committee recommending that Doctor Rhamy's paper be given a place on the program of the State Society. Discussion was furthered by Doctor Rothschild.

The secretary reported a summary of legislative activities concerning the construction of tuberculosis sanitoria in the state, full-time health officers, liens for practitioners, cult legislation, chiropractic state legislation, dental legislation, and the general situation in the state Legislature.

The secretary reported the status of the Jones-Cooper bill at Washington and Doctor Rawles moved that a letter be sent to our representative stating that this society is opposed to the passage of this bill.

Doctor Harshman made the motion "that this society go on record as favoring a bill to be presented in the Indiana General Assembly which requires physicians to certify as to the advisability of sexual sterilization of feeble-minded persons when such feeble-minded persons are being committed to the Indiana School for Feeble-minded or the Indiana Farm Colony for Feeble-minded," which was seconded and passed.

The matter of sick and accident insurance was brought up by Doctor Cornell and discussed by Doctors Shinaberry, Zehr, Worley, Rhamy, Rothschild, Wright, Sparks and Hall. Doctor Cornell made a motion that this society go on record as being opposed to any system of panel practice. Motion seconded and passed.

Doctor Rawles brought up the matter of state legislation concerning the general outcome with regard to the change of distribution of school taxes. Doctor Weaver moved that the secretary get information from Mr. Ward, superintendent of Fort Wayne city schools, and present this at the next meeting. With the consent of the second this motion was amended that the secretary invite Mr. Ward to address the society on the subject at the next meeting. Motion carried.

Thirty-one members and three guests present.

Adjournment.

L. P. HARSHMAN, M.D.,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The first meeting of the St. Joseph County Medical Society for 1931 was held at the Indiana University Club Rooms, South Bend, January 7th, at 6:30 p. m., as a dinner meeting, with Dr. Marcus Lyon, president, in the chair.

The St. Joseph County Medical Society went on record as opposing the passage of the Jones-Cooper bill, and telegrams were sent to the Indiana senators and representatives at Washington expressing this opposition.

The paper of the evening, "Postoperative Pulmonary Complications," was given by Frederick A. Coller, M.D., professor of surgery, University of Michigan. Professor Coller stressed the point that pulmonary complications could follow all types of operations done under local as well as general anæsthetics; that these complications occurred less often when an operator did his work more slowly and carefully, minimizing the loss of blood and the shock; that the duration of an anæsthetic if well given did not produce these complications. He thought that atelectasis was the pulmonary complication most often encountered and this could be overcome by forced respiration with carbon dioxide. He showed slides of x-ray findings of many cases with pulmonary atelectasis after operation and the x-rays of the same cases after forced respiration. These cases of atelectasis under the carbon dioxide treatment clear up as a rule within twenty-four hours and the patient goes on to complete recovery of the pulmonary complication.

An informal discussion took place in the lounge of the club rooms after adjournment by those surgeons who were especially interested.

The St. Joseph County Medical Society met in the Public Library at South Bend, Tuesday, January 13, 1931, with President Lyon in the chair.

Doctor Geisler, chairman of the Public Relations Committee, reported that the Federation of Social Service had established a central bureau of investigation of those deserving charity, with a full-time paid investigator. The details of the investigation of the indigent sick are to be worked out and reported upon at the next meeting.

Dr. R. A. Spenner reported a case of eventration of the diaphragm with x-ray slides of the case shown by Dr. L. F. Fisher.

Dr. R. L. Sensenich reported upon the bill before the Indiana State Legislature carrying out Gov. Harry G. Leslie's plan for the creation of sanitariums throughout

the state under a state aid system. He showed the advantages and disadvantages of the bill. A few of the counties of the state maintain their own sanitariums. St. Joseph County is one of these and maintains a $500,000 tuberculosis sanitarium. The six mills taxation on every $100 of taxable valuation would increase taxes of the county about $18,000 and place the control of sanitariums under the state board of health and thus under political control. St. Joseph County Sanitarium never has been under the political control of the county regardless of which party was in power. The St. Joseph County Medical Society went on record as opposed to this bill and Doctor Sensenich was instructed to forward this opposition to the Indiana State Legislature.

Dr. Milo K. Miller was sent as delegate to the Child Welfare Conference in Indianapolis, called by Governor Leslie, carrying out President Hoover's plan.

The paper of the evening by Doctor Fisher was postponed until the next meeting.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

CLAY COUNTY MEDICAL SOCIETY

Brazil, Indiana, January 23, 1931.

The Clay County Medical Society met in regular session in Physicians Hall at the County Hospital on the evening of January 22, 1931, with a fair attendance and a good program. Practical papers were given by Dr. Clint C. Sourwine on "Pyelitis"; "Scarlet Fever and Its Sequelæ," by Dr. Frederick Nussel. Lively discussion of these subjects was then given by Doctors Maurer, Freed, Lewis, Shattuck and Finley.

A Legislative Committee was appointed by President Sourwine as follows: Drs. Harry Elliott, Luther S. Hirt, Gilbert R. Finch, Geo. W. Finley and Fred C. Dilley.

This local society promises an unusually busy year's work, with programs arranged several months in advance. February meeting will have papers by Dr. Harry Pell on fibroid tumors (discussion led by Dr. Timothy M. Weaver); report on gastric ulcer, by Dr. James W. VanSandt (discussion led by Dr. Lewis C. Rentschler). The March meeting will have a report of rare cases met in the last forty years, by Dr. Martin A. Freed, including one of spleno-myelomalacia. Case reports of recent hospital work by members of the surgical staff and internal medical staff will be presented.

Three new members have been added to the roster of this county within the past year, and many older members are now taking renewed interest in keeping pace with modern medical advances for the benefit of our patients.

GEO. W. FINLEY, M.D.
Secretary.

CORRESPONDENCE

RECIPROCITY WITH ILLINOIS CANCELED

Indianapolis, January 14, 1931.

Editor THE JOURNAL:

The Indiana State Board of Medical Registration and Examination will hold the examination for license to practice medicine at 413 State House, Indianapolis, June 23, 24 and 25, 1931.

At the annual session on the 13th, the reciprocity agreement with Illinois was rescinded. For your information I am enclosing copies of correspondence which recently have passed between the two boards, so that you may more fully understand the reason for this action at this time.

Indiana licentiates have been required to comply with the minimum requirements as adopted by the Federation of State Boards, also the Council on Medical Education of the American Medical Association, viz: high school plus two years in a recognized college of arts and sciences, with certain prescribed hours in the sciences, chemistry, physics and biology as prerequisite to matriculation in medical college, followed by four years in a Class A medical college.

The Indiana Board believes that in requiring our licentiates who have complied with the minimum requirements as above, and who have taken the examination for licensure in Indiana, to submit to an additional examination in the clinical sciences, the Illinois Board is subjecting such Indiana men to "unjust and arbitrary exclusion." We feel that in adopting this resolution we are acting in the interest of our medical citizens.

Very truly,
WILLIAM R. DAVIDSON,
Secretary,
Indiana State Board of Medical
Registration and Examination.

BOOK REVIEWS

Books received since January 1, 1931:

INTESTINAL TOXEMIA. Biologically Considered. By Anthony Bassler, M.D., F.A.C.P., Consulting Gastroenterologist, St. Vincent's, Peoples' and Jewish Memorial Hospitals, New York City, etc. 433 pages, illustrated with sixteen text cuts. Cloth. Price $6.00.

PRIMER ON FRACTURES. Prepared by the Cooperative Committee on Fractures under the auspices of the Section on Surgery, General and Abdominal, and the Section on Orthopedic Surgery in cooperation with the Department of Scientific Exhibit of the American Medical Association. 55 pages. Cloth. Price $1.00. American Medical Association, Chicago, 1930.

COMPEND ON BACTERIOLOGY. Including Pathogenic Protozoa. By Robert L. Pitfield, M.D., Attending Physician, Germantown Hospital, Philadelphia; and Howard W. Schaffer, M.D., Pathologist to the Memorial Hospital, Philadelphia. Fifth edition. 317 pages with 4 plates and 82 other illustrations. Cloth. Price $2.00. P. Blakiston's Son & Co., Inc., Philadelphia, 1930.

PHYSICS OF RADIOLOGY. For the Student of Roentgenology and Radium Therapy. By J. L. Weatherwax, M.A., Physicist, Philadelphia General Hospital, Associated in Radiotherapeutic Physics, University of Pennsylvania Graduate School of Medicine. Foreword by Henry K. Pancoast, M.D., Professor of Roentgenology, University of Pennsylvania. 240 pages with 126 illustrations. Flexible binding. Price $5.00. Paul B. Hoeber, Inc., New York, 1931.

SURGICAL CLINICS OF NORTH AMERICA. Philadelphia Number—December, 1930. 316 pages with 95 illustrations. Per Clinic year, February, 1930, to December, 1930, paper, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia, 1930.

RECENT ADVANCES IN THE STUDY OF RHEUMATISM. By Frederic John Poynton, M.D., F.R.C.P., Physician, University College Hospital; Senior Physician, Hospital for Sick Children; and Bernard Schlesinger, M.A., M.D., M.R.C.P., Physician to the Children's Department, Royal Northern Hospital. 313 pages with 25 illustrations. Cloth. Price $3.50. P. Blakiston's Son & Co., Inc., Philadelphia, 1931.

CLINICAL ALLERGY, PARTICULARLY ASTHMA AND HAY FEVER. MECHANISM AND TREATMENT. By Francis M. Rackemann, M.D., Physician to the Massachusetts General Hospital, Instructor in Medicine, Harvard Medical School, Boston, Mass. 617 pages. Cloth. Price $10.50. The Macmillan Company, New York, 1931.

ABDOMINO-PELVIC DIAGNOSIS IN WOMEN. By Arthur John Walscheid, M.D., Director of Obstetrics and Gynecological Department of Broad Street Hospital, etc. 1000 pages, with 397 illustrations and one color plate. Cloth. Price $12.50. The C. V. Mosby Company, St. Louis, 1931.

Reviews:

CHRONIC ARTHRITIS AND RHEUMATOID AFFECTIONS. With Recovery Record. By Bernard Langdon Wyatt, M.D., F.A.C.P. 166 pages. Price $2.50. Wm. Wood & Co., Publishers.

This is a small book written on an important subject and intended for the intelligent patient as well as for the practitioner of medicine. The first chapter or so contains an excellent analysis of statistics on the subject of chronic arthritis, giving particular consideration to sex, age, occupation, etc. The entire book contains many practical suggestions for prevention and treatment and is quite evidently intended to be used by the patient who is being treated. At the back of the book there is a section with blank pages wherein the patient is expected to record his daily observations and make monthly summaries of his condition, improvement, etc. We have no doubt that intelligent patients suffering from arthritis will be able to learn a great deal about themselves from the reading of this book and that they will thereafter be able to take a more intelligent interest in their condition. Very likely in most cases this would have the effect of encouraging them to follow the medical directions given by their physician. We can honestly recommend the book to doctors for the purpose of their own instruction and for giving to the patient.

MICROBIOLOGY AND ELEMENTARY PATHOLOGY. By Chas. G. Sinclair, B.S., M.D., for the use of nurses. 102 illustrations, well printed and bound. 362 pages. F. A. Davis Company, publishers.

We have here a text intended to be used in nursing training schools for the teaching of bacteriology and related subjects. The author of this review is much interested in such books for the reason that he has the responsibility of teaching nursing bacteriology in a large hospital. Frankly, however, he does not quite understand why nurses need technical training in bacteriology unless they can also have a most practical instruction in this subject as well. For the most part there is not time for both a highly theoretical course and many practical applications as well. We doubt very much if a nurse needs to study the details of medical bacteriology. She does need to understand principles of transmission to the end that she may protect herself and others; she needs to be able to use antiseptics intelligently; she needs practice in handling various things to keep them sterile or uncontaminated; she should be able to collect specimens for bacteriological examination and to get them in good condition to the laboratory; she should be generally intelligent about the various infectious diseases. The present book is like most books in nursing bacteriology in that it is very much a medical bacteriology written down for nurses. We think it would be better if it were nursing bacteriology written for nurses in the first place. A nurse is not expected to diagnose, treat or give out prognosis and, in our opinion, therefore, does not need a technical treatise on the subject.

NORMAL PHYSICAL SIGNS. By Wyndham B. Blanton, B.A., M.A., M.D., Assistant Professor of Medicine, Medical College of Virginia. The C. V. Mosby Company, St. Louis, Missouri, publishers. 246 pages. Price $3.00. Well printed and illustrated.

This book is exactly what the name implies, simply a compilation arranged in logical outline form of the physical signs which are observed in healthy individuals. It is evidently intended for those who examine recruits, students, inmates of institutions, etc., and would apparently be excellent for that purpose. It is attractively printed and has a number of excellent illustrations.

OPERATIVE SURGERY. By Harry Sturgeon Crossen, M.D., F.A.C.S., Professor of Clinical Gynecology, Washington University School of Medicine, and Gynecologist-in-Chief to the Barnes Hospital and the Washington University Dispensary, and Robert James Crossen, M.D., Instructor in Clinical Gynecelogy and Obstetrics, Washington University School of Medicine, etc. Fourth edition, illustrated with 1246 illustrations and two color plates. 1078 pages. Cloth. Price $15.00. The C. V. Mosby Co., St. Louis, 1930.

This book is exactly what its title indicates—a manual of operative technique, wherein one can find a careful description of practically every type of operation designed to relieve gynecologic pathology.

The text is liberally supplemented by well-executed illustrations which, of course, add immensely to the value of a book of this character. In this connection it would be well to observe that a few of these illustrations seem wholly unnecessary. Those illustrations of the vintage of 1890 which cover a page and contain all the articles supposedly necessary to perform a certain operation, even to a tube of catgut, would seem at this date to be *passe*.

When one considers that surgery has much of precise workmanship in it, a book of this character cannot fail being helpful.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

ANTIPNEUMOCOCCIC SERUM, TYPE 1.—An antipneumococcus serum (New and Nonofficial Remedies, 1930, p. 351) marketed in packages of one 50 cc. double-ended vial with apparatus for intravenous injection. The National Drug Co., Philadelphia.

ERYSIPELAS ANTISTREPTOCOCCUS SERUM.—A specific serum containing the antibodies and antibacterial properties of *Streptococcus erysipelatis*. For therapeutic use against erysipelas it may be of value when administered in adequate doses in the early stages of the disease. Though there is no evidence for the value of nonspecific antistreptococcus serums, there appears to be some evidence for the value of a serum representing the antigenic and antibacterial properties of *Streptococcus* erysipelatis.

ERYSIPELAS ANTISTREPTOCOCCIC SERUM-LILLY (Concentrated Globulin).—The serum is obtained from horses immunized with strains of hemolytic streptococci obtained from human cases of erysipelas. It is marketed in packages of one syringe containing an average initial therapeutic dose. Eli Lilly & Co., Indianapolis.

RICHARDS PSYLLIUM SEED.—A brand of psyllium seed-N. N. R. (New and Nonofficial Remedies, 1930, p. 311). Richards Pharmacal Co., Inc., New York.

OINTMENT SCARLET RED BIEBRICH 8 PER CENT.—An ointment composed of scarlet R medicinal Biebrich-N. N. R. (New and Nonofficial Remedies, 1930, p. 148) 8 percent in a base consisting of stearin, wool fat and petrolatum. The National Drug Co., Philadelphia.

TYPHOID-PARATYPHOID A VACCINE.—This product (New and Nonofficial Remedies, 1930, p. 373) is also marketed in packages of three 1 cc. vials. The National Drug Co., Philadelphia.—(*Jour. A. M. A.*, December 6, 1930, p. 1745).

ANTIRABIC VACCINE, SEMPLE METHOD.—An antirabic vaccine (New and Nonofficial Remedies, 1930, p. 352) prepared according to the general method of David Semple (phenol killed). It is marketed in packages of fourteen vials, each containing 2 cc.; in packages of fourteen vials, each containing 2 cc. and a syringe; in packages of fourteen syringes, each containing 2 cc. Medical Arts Laboratory, Inc., Oklahoma City, Oklahoma.

DIPHTHERIA TOXOID-SQUIBB.—This product (New and

Nonofficial Remedies, 1930, p. 364) is also marketed in packages of twenty 1 cc. ampules of diphtheria toxoid and two 1 cc. ampules of diluted diphtheria toxoid for the reaction test. E. R. Squibb & Sons, New York.

NORMAL HORSE SERUM.—This product (New and Nonofficial Remedies, 1930, p. 340) is also marketed in packages of one 50 cc. vial. E. R. Squibb & Sons, New York.

SODIUM GOLD THIOSULPHIATE.—*Sodii et Aurii Thiosulphas.*—Gold Sodium Thiosulphate.—The complex salt formed from one molecule of gold thiosulphate and three molecules of sodium thiosulphate, containing approximately 37.4 percent of gold. The use of sodium and gold thiosulphate in the treatment of lupus erythematosus is considered a distinct advance in the therapy of this condition. The beneficial and often curative action of the drug in a good percentage of cases seems to warrant giving it a definite place in the treatment of a disease for which at present there is no specific remedy. The drug must be used with extreme caution. Dosages at first advocated have been found too great, resulting frequently in severe and even fatal reactions. Even with smaller doses, accidents have occurred.

GOLD SODIUM THIOSULPHIATE-ABBOTT.—A brand of sodium gold thiosulphate-N. N. R. It is supplied in ampules containing, respectively, 0.05 Gm., 0.1 Gm., 0.25 Gm., and 0.5 Gm. Abbott Laboratories, North Chicago, Illinois.

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE (Diphtheria Prophylactic).—This product (New and Nonofficial Remedies, 1930, p. 356) is also marketed in packages of one hundred and fifty 1 cc. vials, fifty immunizations. The National Drug Co., Philadelphia.

DIPHTHERIA TOXOID.—This product (New and Nonofficial Remedies, 1930, p. 365) is also marketed in packages of five immunization treatments, in packages of fifty immunization treatments. For the two-dose method of treatment the following forms are marketed: Packages of one immunization treatment; packages of five immunization treatments; packages of ten immunization treatments, consisting of one vial; packages of fifteen immunization treatments, consisting of one vial; packages of fifteen immunization treatments, consisting of thirty vials and packages of fifty immunization treatments, consisting of one hundred vials. The National Drug Co., Philadelphia.

POLLEN ALLERGEN SOLUTIONS-SQUIBB.—The following pollen allergen solutions-Squibb (New and Nonofficial Remedies, 1930, p. 27) are marketed in treatment set packages of three 3 cc. vials; Ragweed Combined Pollen Allergen Solution-Squibb; Timothy Pollen Allergen Solution-Squibb. E. R. Squibb & Sons, New York.—*(Jour. A. M. A.,* December 20, 1930, p. 1913.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

KEMP'S SUN-RAYED PURE TOMATO JUICE (The Sun-Rayed Co., Division of Kemp Brothers Packing Co., Frankfort, Ind.)—A homogenized, pasteurized tomato juice seasoned with salt. The product contains: total solids, 4.8 percent; ash, 0.78 percent; sodium chloride, 0.4 percent; fat, 0.03 percent; protein, 0.9 percent; crude fiber, 0.1 percent; total carbohydrates, 3 percent. The vitamin C content is but slightly less than that of fresh untreated tomato juice. The product is claimed by the manufacturer to be a refreshing beverage, rich in vitamins A, B and C and valuable for infant feeding.

WHITEFIELD GENUINE ORANGE JUICE (Whitefield Citrus Products Corporation of California, Ltd., Fullerton, Calif.).—An unsweetened, uncolored, sterilized orange juice in hermetically sealed bottles or jugs containing a partial vacuum of low pressure. The product contains: total solids, 14.2 percent; acidity by titration as citric acid, 1.4 percent; ash, 0.42 percent; fat, 0.1 percent; volatile oils, 0.01 percent; protein, 1.1 percent; reducing sugar, 10.1 percent; total carbohydrates, 11.1 percent. The manufacturer claims that the process of manufacture insures a uniform orange juice for use throughout the year, with a nutritional value practically that of fresh orange juice.—*(Jour. A. M. A.,* December 13, 1930, p. 1835.)

PROPAGANDA FOR REFORM

ROENTGEN DIAGNOSIS OF SYNOVIAL ADHESIONS.—Another chemical adjunct to roentgen diagnosis seems to be available. With this new aid, altered permeability of synovial membranes can be determined and accurate pictures secured of synovial adhesions. This substance is a disodium salt of tetraiodo-orthosulphobenzoic acid. The substance is reported to be relatively nontoxic and to be well borne when injected.—*(Jour. A. M. A.,* December 6, 1930, p. 1749.)

THE PROPHYLAXIS OF COCAINE AND ALLIED INTOXICANTS.—A study to determine the efficiency of barbital compounds in the detoxication of local anesthetics has been made. The minimal tolerated and minimal lethal doses of cocaine, procaine and butyn for rabbits were determined without protection and after the administration of various depressants. The depressants found effective and in the order of their efficacy were urethane (ethyl carbamate), chloral hydrate, paraldehyde, barbital, phenobarbital, and isoamylethylbarbituric acid, the last named being the most effective. The investigators find that there are two types of intoxication into which clinical cases may be divided. One has a prolonged course and death results from primary respiratory failure; the other has a short course and death results from primary cardiac failure. The first type is reproduced experimentally by subcutaneous injection of cocaine, the second type by intravenous injection. Against this second type of intoxication the depressants are valueless.—*(Jour. A. M. A.,* December 13, 1930, p. 1839.)

NEW NAMES FOR OLD UNACCEPTABLE PROPRIETARY PRODUCTS.—The Southwest Medical Supply Company sends out advertising for "Onolin," "Aritine," "Amazine" and "Lesol." Those who read a recent discussion, "The Horovitz Proteins and Lipoids Again," will recognize in the products named the ill-concealed names of Gonolin, Arthritine, Asthmazine and Luesol. Here is a group of the various names under which the Horovitz proteins and lipoids are marketed by various firms. The advertising circulars that are sent for one group are the same (except for the name of the product) as those sent for the other group, the genealogy of which has been traced from the original Horovitz mixtures, through the Merrell Proteogens, to the present products of the Lipoidal Laboratories, Inc. The advertising for each is a farrago of pseudoscience.—*(Jour. A. M. A.,* December 20, 1930, p. 1933.)

AVERTIN.—The Council on Pharmacy and Chemistry reports that Avertin was submitted for consideration in February of this year; that it recognizes the fact that the product presents certain desirable properties but that definite action concerning its recognition is postponed pending investigation of certain of its side actions now being conducted. For the information of the medical profession the Council submits a report concerning the present status of the drug. Avertin is tribrom-ethanol. It was introduced in Germany in 1926, to be used alone for rectal anesthesia, or to be supplemented by other narcotics, including morphine and ether. Later Avertin was offered in a solution, 1 cc. of which contains 1 Gm. of Avertin dissolved in amylene hydrate (tertiary amyl alcohol). This solution has been the subject of several hundred reports. After reviewing the reported advantages

and disadvantages the Council concludes: though the present evidence indicates that Avertin may prove valuable as a means of initiating narcosis but not for complete narcosis, the Council decided not to admit the drug to New and Nonofficial Remedies. *(Jour. A. M. A.,* November 8, 1930, p. 1427.)

NONVOLATILE SUBSTANCES AS ANESTHETICS. — The Council on Pharmacy and Chemistry has accepted a barbital derivative for oral and rectal use as a preliminary to surgical anesthesia. Experimentally this product has also been administered intravenously but such use is far from safe and the manufacturer is not marketing the product for intravenous use. Now the Council publishes a preliminary report on Avertin which substance has been proposed not only for initiating anesthesia but also as the chief means of inducing unconsciousness, to be supplemented when necessary by a small amount of an inhalation or local anesthetic. The Council concludes that Avertin may prove valuable as a means of initiating narcosis, but that it is not proved to be a safe agent for complete narcosis, either by itself or combined with a volatile anesthetic. These two products illustrate a modern tendency in anesthetics. A paper by Lendle seems to show that neither Avertin nor the barbital derivative "Pernocton" is a satisfactory solution of the problem. The products so far proposed for so-called basal anesthesia are hypnotics or sedatives and should be used as such. They cannot be safely used for complete anesthesia and can be safely used in combination with other agents for the production of complete anesthesia only by those thoroughly experienced in the administration of anesthetics and closely familiar with the studies of the use of nonvolatile agents for anesthesia. Thus far their intravenous use must be considered unsafe. *(Jour. A. M. A.,* November 8, 1930, p. 1430.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the U. S. Department of Agriculture which enforces the Federal Food and Drugs Act: Old Mission Laxative Cold Tablets (The S. Pfeiffer Manufacturing Co.), containing chiefly acetanilide, a cinchonine compound, extracts of laxative plant drugs, terpin hydrate, oil of wintergreen and a small amount of potassium bromide. A. D. S. Cold and Grippe Tablets Vadsco Sales Corporation), containing acetanilide, quinine sulphate, aloin, camphor, red pepper and extract of podophyllum. Astyptodyne and Astyptodyne Cough Syrup (Astyptodyne Chemical Co.), the first consisting of pine oil and the second of sugar syrup and two per cent of pine oil. Nip-A-Co Capsules (Frederick Stearns and Co.), containing essentially acetanilide, cinchonine sulphate, magnesium carbonate, red pepper, extracts of plant drugs including podophyllum and jalap, traces of salicylic acid and alkaloids of aconite. Pronto (The National Drug Products, Inc.), consisting essentially of ammonium salicylate, glycerine, small amounts of potassium, antimony and free ammonia, traces of magnesium, chlorides and sulphates and an extract of a laxative drug plant. *(Jour. A. M. A.,* November 8, 1930, p. 1444.)

SOMNOFORM.—Yandell Henderson writes that he has recently received from the Stratford-Cookson Co. an advertisement of "Somnoform," stated to have the formula: chloride of ethyl, 83 per cent; chloride of methyl, 16 per cent; bromide of ethyl, 1 per cent. Henderson believes that if the claim is true that "the record of Somnoform for safety is without equal" the record must be regarded as a pure piece of good fortune for two at least of the ingredients have a toxicity which renders them unfit for use as anesthetics. In 1919 the Council on Pharmacy and Chemistry declared Somnoform inadmissable to New and Nonofficial Remedies because in the absence of acceptable evidence showing its exceptional safety and value, the claims made for it were held to be unwarranted and because the name of the mixture is not descriptive of its composition. *(Jour. A. M. A.,* November 8, 1930, p. 1445.)

NATURE OF THE SUBSTANCE IN LIVER ACTIVE IN PERNICIOUS ANEMIA.—The search for the "active principle" which renders liver potent in the treatment of pernicious anemia has resulted in the isolation of an active crystalline salt demonstrated to be clinically potent in pernicious anemia. It is a compound of beta-hydroxyglutamic acid and hydroxyproline. Both of these substances possess the characters of protein derivatives, the mode of their linkage remains to be ascertained. *(Jour. A. M. A.,* November 15, 1930, p. 1509.)

THE DUGDALE LIBEL SUIT.—Frederick Dugdale, M.D., of Lowell and Boston, had his license to practice medicine in Massachusetts revoked April 18, 1929, for "gross misconduct in the practice of his profession." The Lowell (Mass.) *Sun* published an account of the hearing connected with the revocation proceedings and stated that the charges against Dugdale grew out of the alleged professional misconduct on his part in the treatment of a patient who subsequently died of cancer. As a result of this publication Dugdale brought suit against the publisher of the *Sun,* charging libel and demanding damages. The case came to trial and the jury brought in a verdict in favor of the newspaper. For some years Dugdale advertised as a "specialist" in "skin, blood and nervous diseases" and operated a mail order "rheumatism cure"; later he was one of the disciples of the Abrams cult. For some years Dugdale had his own "cancer cure." Still later, as the Koch "cancer cure" became a money-maker, Dugdale became a Koch disciple and in the libel suit the Koch "treatment" figured largely. *(Jour. A. M. A.,* November 15, 1930, p. 1523.)

HEXYLRESORCINOL AS AN ASCARICIDE.—Lamson and his collaborators believe that they have discovered an effective ascaricide in hexylresorcinol. According to New and Nonofficial Remedies, the drug is stated to be relatively nontoxic when administered by mouth. The drug has irritant properties, but these are not regarded as a contraindication for its occasional use and they are transitory in effect. *(Jour. A. M. A.,* November 22, 1930, p. 1592.)

VIOSTEROL.—Holtz and Schreiber of Gottingen have reached the conclusion that irradiation of ergosterol produces a number of distinct substances. One is the antirachitic factor, perhaps vitamin D proper; another is a separate component producing calcification. The two effects, antirachitic and toxic, can be separated; or at least one can be destroyed while the other remains intact. If these observations prove to be correct, they may lead to a desirable purification of viosterol so as to eliminate or diminish the "toxic" features of its action. *(Jour. A. M. A.,* November 22, 1930, p. 1593.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Knewitz's Stopake Powders (G. Knewitz) capsules each containing essentially 3 grains of acetanilid and 6 grains of aspirin. Mentho-Mustard (Mentho-Mustard Co.), an ointment containing small amounts of volatile oils including mustard oil, camphor, menthol and wintergreen. Nos-I-Ons (The Nos-I-Ons Co.), consisting essentially of petrolatum, quinine sulphate, salicylic acid, camphor and eucalyptol. Foley's Cold and Grippe Tablets (Foley and Co.), consisting essentially of acetanilid and cinchonin compound, red pepper and an extract of a laxative plant drug. McLean's Tar Wine Cough Balm (Dr. J. H. McLean Medicine Co.), consisting essentially of small amounts of extracts of plant drugs, including licorice, wood tar, sugar, alcohol and water. Pneumo-Phthysine (Pneumo-Phthysine Chemical Manufacturing Co.), essentially a clay poultice containing glycerine, creosote, small amounts of guaiacol, oil of wintergreen, containing formaldehyde and a quinine compound. (In April, 1929, Pneumo-Phthysine became "Numotizine".) Williams' 101 Tonic (Interstate Drug Co.), consisting essentially of epsom

salts, quinine sulphate, ferric chloride and glycerine. Solomon Whitfield Smith's Veneral Medicine (S. W. Smith and Co.), consisting essentially of turpentine oil, copaiba, copper sulphate, alcohol and water. Healing Ointment (Manhattan Drug Co.), an ointment having a petrolatum and wool-fat base, with zinc oxide, boric acid, phenol, sulphur, menthol and other volatile oils. Rapid Quinine Laxative Cold Tablets (G. P. Steyh Importing Co.), containing acetanilid, chalk, baking soda, milk sugar, extracts of plant drugs, including a laxative drug, and a small amount of alkaloids, but no quinine. Vapomentha Salve (Rox Chemical Co.), consisting essentially of petrolatum with turpentine oil and volatile oils including camphor, menthol and eucalyptus. Case's Antiseptic Ointment (The Case Manufacturing Co.), consisting essentially of a tallow base, containing small amounts of phenol and volatile oils, including camphor and sassafras oil. *(Jour. A. M. A.,* November 22, 1930, p. 1606.)

THE ETIOLOGY OF GINGER PARALYSIS.—Within the past year a peculiar form of paralysis has afflicted many persons, particularly throughout the midwestern or southwestern states. Evidence has accumulated that the malady is closely associated with the drinking of fluidextract of ginger. The latter has been sold extensively since the introduction of the Volstead Act, for beverage purposes, because of a ruling of the Prohibition Bureau to the effect that the official fluidextract of ginger is a nonpotable beverage, thus removing the restriction from its sale. It was concluded from the evidence that an adulterated and poisoned product was being circulated last winter. An investigation was undertaken by the United States Public Health Service and this has shown that the paralysis was caused by tricresyl phosphate present in some fluidextracts of ginger as an adulterant. *(Jour. A. M. A.,* November 29, 1930, p. 1672.)

SOME MISCELLANEOUS "SPECIALISTS".—Three schemes have recently been worked, on the profession and the public, respectively. Each was operated by a physician: Dr. F. J. James, Paris, Illinois, circularized physicians, offering three outstanding prescriptions: No. 1 for renal dropsy; No. 2 for acid stomach and fermentation and No. 3 an "absolute specific" for acne. Dr. John W. Nelson, Jamestown, N. Y., circularized laymen under the name "A. E. Daley," offering to sell for $16 sexual advice and instruction and "facts of great importance" found as a result of an "intensive study of the anatomy and function of our sexual organ." Dr. B. J. Cline, Poplar Bluff, Mo., offered to sell prescriptions: One "absolutely controls Whooping Cough"; another for acute or chronic poison ivy inflammation; a third for sciatica; a fourth is an enema for the treatment of pneumonia; a fifth is for hay fever and a sixth is for venereal warts. Such incidents as these do not redound to the credit of the medical profession. *(Jour. A. M. A.,* November 29, 1930, p. 1688.)

ABSTRACTS

TUBERCULOSIS OF THE TONGUE

According to reports occurring in medical literature, lingual tuberculosis is infrequent, only 334 cases having been recorded up to March, 1929. The lesion is usually associated with tuberculosis in other parts of the organism, generally the lungs. It is improbable, asserts Rigney D'Aunoy and J. W. Miller, New Orleans *(Journal A. M. A.,* July 12, 1930), that primary tuberculosis of the tongue in the broadest acceptance of the term is of frequent occurrence, although readily indicated experimentally. Diagnosis can be accomplished with certainty only by the use of histobiologic methods. The prognosis is always unfavorable. This is especially the case because the lesion is usually a manifestation of a late localization or occurs secondarily in the course of a bronchopulmonic or generalized tuberculous process. If the lesion is single or so-called primary, by which is meant essentially a lesion in an organism in which other tuberculous foci or processes are not distinctly discernible or arrested, the prognosis may be considered fair. The authors report three such cases.

OUR EIGHTEENTH CENTURY METHOD OF TREATING SUPPURATIVE OTITIS MEDIA

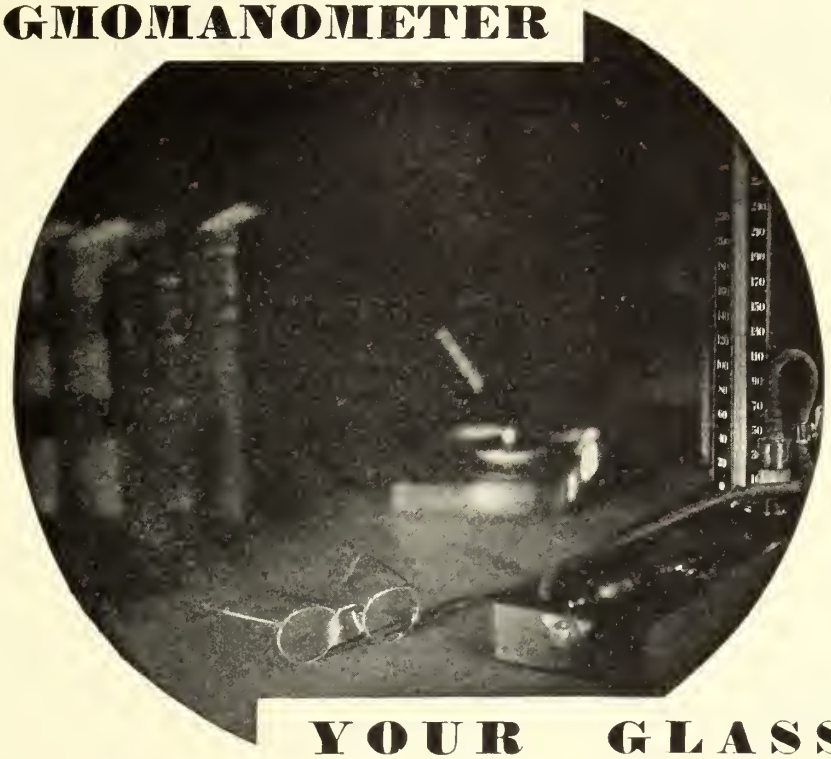
JOHN A. PRATT, Minneapolis *(Journal A. M. A.,* Oct. 25, 1930), says that in the past and present methods of treating suppurative otitis media, the most important factor, drainage, seems to have been ignored. He asserts that the powerful suction of capillary attraction is well known. It is the use of this well known force that is employed in the dry treatment of suppurative otitis media. With a well made, elongated swab of highly absorbent cotton, all fluids in continuity can be drained. In following this fact, Pratt has been using continuous drainage of the middle ear for the past twenty-five years, with remarkable success. However, he has found only two using the method of continuous drainage in suppurative otitis media, one of these being a former student of his at the University of Minnesota. He describes his method of treatment in detail.

PATIENT WITH HEART DISEASE AS SURGICAL RISK

Four hundred and fourteen patients suffering from heart disease, who underwent 494 operations, were studied by Stuyvesant Butler, Chicago; Neil Feeney, Montreal, and Samuel A. Levine, Boston *(Journal A. M. A.,* July 12, 1930), in order to determine the risk of operation and the role played by the heart on the outcome. Deaths were divided into two types, "unexpected" and "inevitable". There were 28 unexpected deaths; *i. e.,* a mortality of 6.3 percent. One hundred and forty-seven operations were performed on 120 patients with valvular heart disease, with 3 unexpected deaths; *i. e.,* a mortality of 2.1 percent. One hundred and sixty-seven operations were performed on 138 patients having chronic myocarditis, with 8 unexpected deaths; *i. e.,* a mortality of 4.9 percent. These patients were mostly older persons and tolerated operation well. There were 108 operations performed on 87 patients with auricular fibrillation, with 3 unexpected deaths; *i. e.,* a mortality of 3 percent. Contrary to the general opinion, the risk of operating on such patients is not great. Forty-one operations were performed on 35 patients having angina pectoris, with 3 unexpected deaths; *i. e.,* a mortality of 7.7 percent. There seems to be a slight risk of coronary thrombosis following in the wake of surgical intervention in patients with angina pectoris. There were 20 operations performed on as many patients with coronary thrombosis. There were 8 unexpected deaths; *i. e.,* a mortality of 44.5 percent. Various measures discussed here should materially diminish this high death rate. Thirteen operations were performed on 11 patients with syphilitic aortitis. There was one unexpected death. There were 6 patients with paroxysmal tachycardia, 3 of whom had attacks during operation and 3 after operation. All recovered. There were 50 operations performed on as many patients with congestive heart failure. There were 7 unexpected deaths; *i. e.,* a mortality of 17.1 percent. There were 433 operations performed on 359 patients having heart disease without nephritis. Twenty unexpected deaths occurred; *i. e.,* a mortality of 4.9 percent. There were 61 operations performed on 55 patients having heart disease with nephritis, with 8 unexpected deaths; *i. e.,* a mortality of 14.8 percent. This well illustrates the increase in risk which results from the presence of nephritis. The survival of the patient with heart disease is not the only consideration. Conditions for which there are nonoperative palliative methods of treatment should not be subjected to surgery when the heart disease is so grave that the ultimate life expectancy,

(Continued on adv. page xx)

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(Continued from page 122)

at best, is short. In most types of heart disease the surgical risk is not appreciably greater than in the normal person. In some in which the risk would be great, it may be materially diminished with proper preoperative diagnosis and therapy.

DISEASES PRODUCED AND PREVENTED BY CERTAIN FOOD CONSTITUENTS

Edward Mellanby, Sheffield, England *(Journal A. M. A.*, Jan. 31, 1931), discusses the relation of diet to the development of teeth, and especially as a cause of caries; the possibility of getting complete control of dental caries by diet alone, both by producing perfect teeth and, even when the teeth are badly formed, by inhibiting the destructive action of bacteria on the teeth; the relationship between diet and the central nervous system, especially the spinal cord, and the possible relationship between diet, especially vitamin A, and the resistance of the body against certain types of infection. The main lesson seems to be that there are some factors in diet tending to the production of and others tending to the prevention of disease.

THYMOPHYSIN TEMESVARY

In the experimental work done by Erwin E. Nelson, Ann Arbor, Michigan *(Journal A. M. A.*, Jan. 31, 1931), the "Thymophysin" used was obtained on the open market in May, 1930. The pituitary extract used was a lot of the same serial number of a commercial preparation of the same stated strength as "Thymophysin." The particular preparation has been examined many times and found to be uniform and to conform to the U. S. P. X. requirements. He made an assay of the oxytocic and the pressor activity of thymophysin and compared the oxytocic activity of pituitary extract and thymophysin. Modification of pituitary activity by thymus was also investigated. It is his belief that there is as yet no evidence from the present investigation or in the published experiments of others to justify the conclusion that the pressor or oxytocic activities of pituitary are in any way modified by the addition of thymus extract. The theoretical considerations leading to the clinical use of a mixture of these two substances are held therefore not to be established. The clinical results obtained can be explained completely as due to the use of small doses of pituitary extract. Experimentally, no difference could be found in the pressor or oxytocic activity of pituitary alone as compared with pituitary plus thymus extracts. The strength of "Thymophysin" ampules examined by pressor and oxytocic methods was found to be from 25 to 33 percent of that claimed on the labels. When equivalent doses of pituitary extract and "Thymophysin" were compared on the excised uteri or on the blood pressure, no differences in action could be demonstrated.

COMPARISON OF BILIARY DRAINAGE AND CHOLECYSTOGRAPHY IN GALLSTONE DIAGNOSIS: BILE MICROSCOPY

H. L. Bockus, Harry Shay, J. H. Willard and J. F. Pessel, Philadelphia *(Journal A. M. A.*, Jan. 31, 1931), regard nonsurgical biliary drainage as an examination of paramount importance in the positive diagnosis of gallstones. One hundred and twenty-four patients in whom cholesterol crystals or so-called bilirubin calcium pigment were recovered from the bile preoperatively have been subjected to operation. Finding these two elements in the same bile is pathognomonic of cholelithiasis (seventy-two cases). Cholesterol crystals without the characteristic pigment (eighteen cases) is 89 percent accurate and bilirubin calcium pigment (thirty-four cases) 90 percent accurate in gallstone diagnosis. The value of bile drainage and of cholecystography has been analyzed in 148 proved cases of cholelithiasis. A positive stone diagnosis was suggested by drainage in 83.2 percent and by cholecystography in 29.2 percent of cases. The superiority of drainage in the positive diagnosis of gallstones seems dependent on two factors. In the cases showing persistence of gallbladder function the pathognomonic elements can be recovered from the bile in practically every instance. A normal cholecystogram without stone shadows was recorded in 21 percent of their "persistent function" cases. Of equal importance is the ability to obtain a sufficient amount of bile from the gallbladder by drainage for the recovery of crystals in cases of absent shadow by cholecystography in the nonfunction group. If evidence of gallbladder dysfunction by cholecystography is considered indicative of gallbladder disease, the superiority of drainage over cholecystography becomes more apparent than real, since many of the stone cases present absent or faint shadow. Evidence of a pathologic gallbladder was obtained by cholecystography in 88.4 percent of cases, as compared with 98 percent by drainage. The necessity for confirmation of absent function is equally important in the two methods. Absence of B bile must be confirmed by a second and often a third drainage, and absent shadow by oral cholecystography likewise necessitates a second examination. Intravenous cholecystography is superior to drainage or oral cholecystography as a gage of gallbladder function if only one study is carried out. In the experience of the authors, bile drainage has proved superior to cholecystography in gallstone diagnosis.

LOCALIZING DIAGNOSIS IN BRAIN TUMOR

In a series of 183 consecutive cases of intracranial neoplasm analyzed by Charles E. Dowman and W. A. Smith, Atlanta, Georgia *(Journal A. M. A.*, Jan. 31, 1931), there were 24 that presented phenomena that might be misleading in localization. Among 140 cases of supratentorial tumor there were 16, and among 43 cases of infratentorial tumor there were 8, that presented such phenomena. Examples of such cases are (1) those cases of cerebral tumor in which bilateral or ipsolateral signs may mislead one as to the side involved; (2) cases of supratentorial tumor simulating cerebellar tumor; (3) cases of cerebellar tumor simulating a supratentorial tumor; (4) cases of cerebral tumor simulating a chiasmal lesion (5) cases of frontal lobe tumor with homolateral fifth nerve palsy and contralateral hemianopia, and (6) cases of cerebellar tumor simulating an acoustic nerve tumor. In such cases, accessory methods of diagnosis, such as special methods of roentgenologic study, and ventricular estimations of ventriculography are said to be indicated.

RADIUM IN TREATMENT OF HEMANGIOMA OF LARYNX

Frank E. Simpson, Chicago *(Journal A. M. A.*, Jan. 31, 1931), reports two cases of radium in the treatment of hemangioma of the larynx. In one, radon was applied to the larynx externally, and in the other, radon was applied to the base of the tongue. These two cases represent a type of angioma so extensive that surgery would be dangerous. They differ clinically from the small rounded hemangiomatous tumors described by Kramer and Yankauer and others, which are found on the true cords and may be removed by intralaryngeal surgical measures.

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MASSIVE COLLAPSE OF THE LUNG*

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Massive collapse of the lung, or massive pulmonary atelectasis, or apneumatosis, as it is variously called, is a condition that is coming to be more frequently diagnosed of recent years because of the increased attention directed to it by a number of enthusiastic workers, so that it can no longer be considered a rare postoperative complication. Many cases, of course, go unrecognized, and many are diagnosed something else, but if the various forms and degrees are taken into consideration the statement of Coryllos that fifty to seventy percent of patients subjected to surgical operation will have this pulmonary complication in some form or degree is probably not exaggerated. The condition was first recognized and reported by William Pasteur in 1890 in the *American Journal of the Medical Sciences*. He described massive pulmonary collapse found postmortem in fatal cases of diphtheria, and thought the condition was due to diaphragmatic paralysis. He published subsequent articles on the same condition in 1895, 1908, 1910, 1911, and 1914. In the later papers he extended his studies and called attention to the occurrence of the condition as a postoperative complication in abdominal surgery. His full and careful descriptions have served to establish this postoperative complication as a not uncommon clinical entity. Notwithstanding this brilliant work of Pasteur, which is all the more commendable because it was done without the aid of roentgenograms, very little impression was made upon the medical world. Up to 1925 only sixty-eight cases were recorded in the literature. Since 1925, however, the subject has been receiving increasing attention, and there has been a veritable flood of contributions dealing with every possible phase of the question: etiology, symptoms, signs, roentgenological findings, etc., but especially with the mechanism and physiology of its production.

The clinical picture of massive pulmonary collapse is about as follows: After some acute illness, some trauma, or some surgical operation, more frequently on the upper abdomen, usually within twenty-four to forty-eight hours there is a sudden change in the patient's condition. There are signs of marked respiratory embarrassment and shock. The patient usually lies upon the affected side. Dyspnœa and cyanosis are obvious upon inspection. There is a rapid, thready pulse, and a sudden definite increase in the respiratory rate, reaching forty or fifty per minute. The pulse and respiration are accelerated far out of proportion to the temperature, which may range from 100 to 104 degrees Fahrenheit. The cough may be short, hacking, and nonproductive early, and later becoming productive in character. The dyspnœa, cyanosis and cough may cause the pateint, though not toxic, to appear seriously ill. His expression denotes anxiety. There is usually a leucocytosis ranging from 10,000 to 20,000, with a relative increase in the polymorphonuclear cells.

Physical Signs: The right lung appears to be involved three times more frequently than the left. Examination of the chest shows diminution of, or even absence of, respiratory movements of the involved hemithorax. The chest wall presents a flattened appearance. The intercostal spaces are narrowed and depressed. The percussion note over the collapsed lung is dull or absolutely flat, due to lack of air. Vocal fremitus usually is diminished or absent. The quality of the breath sounds varies greatly. They are often suppressed, though they are occasionally distinctly bronchial. Vocal resonance is absent or diminished over the collapsed lung. Rales, if present, are noted early in the condition, or later as the collapse subsides. The rales are likely to be coarse and of musical type. The unaffected lung usually presents an increased range of respiratory movements and a hyperresonant percussion note, with exaggerated breath sounds. Large rales may be heard over this lung.

Roentgen Diagnosis. The roentgen appearance in collapse of the lung will depend upon the extent of the collapse, and to some degree on the etiological factors. The following observations apply chiefly to postoperative massive collapse. The degree of density depends upon the completeness of the collapse and the presence or absence of "drowning". The involved area is more dense than the surrounding lung; the heart and the mediastinal contents are displaced toward the

*Presented before the Section on Medicine of the Indiana State Medical Association at the Fort Wayne session, September 25, 1930.

affected side; the diaphragm is high, and in the early stages there is absence of respiratory excursion; the intercostal spaces are narrow and the costophrenic sinus is usually not obliterated. Frequently there is complete collapse of one lobe and partial collapse of an adjoining lobe. The high, fixed position of the diaphragm is a fairly constant finding in all early cases.

This clinical picture and some of the physical signs may simulate closely some other conditions. The postoperative pulmonary complications most likely to be confused with acute massive collapse are pneumonia, pleurisy with effusion, pulmonary embolism and infarction, and acute cardiac accident (dilatation, coronary occlusion, etc.). The character of the shadows produced by these conditions may resemble collapse to such an extent that a differentiation from the shape, density and position alone would be impossible. In these cases, however, the displacement of the heart and the mediastinum to the affected side is absent or slight, never present to the extent seen in collapse. The position of the diaphragm is never so markedly high as in collapse; there is usually some respiratory excursion present; and dull patches in the opposite lung are not infrequent. A marked change in, or a sudden, complete disappearance of, the dull area following cough or change of position is a diagnostic sign which would not be neglected.

Theories as to Etiology. A review of the literature up till very recently reveals a multiplicity of theories regarding the cause of massive collapse. The following hypotheses have been offered:

1. Vasomotor, with dilatation of vessels and stasis, producing bronchial obstruction by outpouring of secretions.

2. Diaphragmatic and respiratory muscle weakness or paralysis. W. Pasteur considered atelectasis in his first cases to be due to postdiphtheritic paralysis of the diaphragm. Briscoe considered it secondary "to a disturbance of the functions of the diaphragm and associated respiratory muscles due to inflammation affecting the retroperitoneal portion of the diaphragm." Others have advocated the theory of reflex paralysis of the diaphragm from some focus of irritation.

3. Bronchoconstrictor theory, based on the experimental work of Churchill, who was able to produce collapse in a lung enclosed in an oncometer by inhibition or paralysis of the bronchodilator fibers of the vagus, and with overactivity of the bronchoconstrictors, either by direct vagal stimulation or by means of injected drugs.

4. Mechanical occlusion of a bronchus.

5. Combination of above factors, as bronchial block plus decreased respiratory force, etc.

To clarify the situation a mass of experimental work has been done upon dogs and other animals within the past few years. Lee and his associates plugged the bronchus of a dog with thick mucus obtained bronchoscopically from a patient with massive collapse and reproduced the same condition. In other dogs they used mucilage of gum acacia. Within a few hours the heart and diaphragm appeared in the x-ray to be displaced toward the side of the plug. Coryllos and Birnbaum later blocked the bronchus with an inflated rubber balloon and obtained x-ray and necropsy evidence of massive atelectasis.

These latter workers, Pol N. Coryllos and George L. Birnbaum, of the Department of Surgical Research, Cornell University Medical School, have done more experimental work, and have had more extensive experience with the clinical condition than any others. Their brilliant work seems to have settled conclusively that there is only one essential cause for atelectasis, and that is bronchial obstruction. This obstruction must be complete. Atelectasis will follow by absorption of the alveolar air by the pulmonary circulation in the part of the lung distal to the bronchial obstruction. This atelectasis may be massive lobar or lobular according to the size of the obstructed bronchus. All other conditions, such as paralysis of the respiratory muscles, nervous reflexes, posture, interference with the thoracic movements by postoperative pain, or by narcotics, act only as adjunct and favoring causes and will not result in atelectasis unless they finally produce bronchial occlusion. Bronchial obstruction, however, cannot arise as a postoperative complication unless two factors are present. The first is an increase in the amount and the viscosity of the bronchial secretion, and the second is the inability of the lungs to expel it because of weakening of the natural means of defense of the lung.

Nature has provided the lungs with several protective devices and reactions. The most obvious is the cough reflex by which irritating foreign bodies are removed. The epithelium lining the mucous membrane of the bronchial tubes bears cilia which produce a continual flow of secretion from the depths of the lungs outward. Lastly, there are the less obvious, but more constantly acting, movements of respiration which are probably accompanied by peristaltic contractions and relaxationes of the air tubes. C. C. Macklin in an excellent monograph, published in *The Physiologic Review*, for January, 1929, has called attention to the fact that not only are the walls of the bronchi and bronchioles largely composed of nonstriated muscle tissue, but even in the finer structure of the air sacs the lungs are essentially muscular organs. He shows that the bronchi, bronchioles and air sacs have a definite muscular tonus. They are contractile, and probably in a normal individual continually carry on peristaltic contractions similar to the alimentary canal, from which the lung is derived embryologically.

It is manifest that any conditions subsequent to operation, or to accident, or accompanying severe illness, which tend to put in abeyance these defensive mechanisms for clearing the lungs may permit the accumulation of mucus to form a plug in an air tube and to produce atelectasis. Yandell Henderson has again forcefully insisted upon the im-

portance of the role of acapnia in these postoperative complications. Acapnia he defines as a deficiency of carbon dioxide in the blood and tissues, and is usually accompanied with asphyxia, or deficiency of oxygen in the tissues. After every major surgical operation there is a resultant atonic condition of all the muscles of the body and a decrease of muscular pressure on the tissues which causes a general venous stagnation. With this there is a prolonged loss of tonus and relaxation in the thoracic muscles and the diaphragm which causes a greatly decreased vital capacity of the thorax, and the chest remains continuously in a position of expiration with the lungs largely deflated. "The fundamental condition is a disturbance of the respiratory metabolism of the tissues which leads, through processes that are still obscure, to the acapnial state."

Further studies of Coryllos and Birnbaum with clinical pneumonia, postoperative pneumonia and experimental pneumonia in dogs, led them to the startling conclusion that massive collapse of the lungs and pneumonia represent two phases of the same morbid condition. Thus they came to formulate a new theory of the pathogenesis of lobar pneumonia, either postoperative or medical, which, revolutionary as it may appear at first sight, seems to explain a number of features in pneumonia that have been inexplicable up to this time. The difference between atelectasis and pneumonia are differences only in degree of shrinkage, because in the atelectatic lung there is little or no exudate in the alveoli of the affected portion, whereas in the pneumonia lung the alveoli are filled up with exudate rich in fibrin. Otherwise they have the same etiology, and the same mechanism of production; they present a similar clinical evolution and they show similar pathological changes.

If between postoperative atelectasis and postoperative pneumonia there are no differences except in degree between postoperative pneumonia and medical pneumonia the differences are still smaller. So postoperative pneumonia is the connecting link between atelectasis and medical pneumonia, and the experimental study of atelectasis gives the key to the pathogenesis of postoperative pneumonia and to the medical pneumonias in general. In substantiation of this it has been clearly shown by bronchoscopic examination in patients with medical pneumonia that the bronchus corresponding to the affected lung area, and only this one, was occluded with thick viscid exudate, and the air circulation interrupted. Displacement of the mediastinum and of the diaphragm to the affected side, especially at the earlier stages of the pneumonia, is more frequent than is generally believed and can be found if carefully looked for. Likewise postmortem examination of human beings and of dogs dying of lobar pneumonia, contrary to the generally accepted opinion, reveals that the size of the affected lobes is smaller than that of the healthy lobes. The enlargement of the consolidated lung is only apparent and is due to the collapse of the healthy lung when the thoracic cavity is opened. In order to appreciate the true sizes of the consolidated and the healthy lobes it is necessary to clamp the trachea and then to open the chest with only the minimum manipulation of the healthy lobes. This decreased size of the pneumonic lung, as shown by Roentgen ray and postmortem studies, points to a similar pathogenesis in pneumonia and atelectasis.

So these workers felt justified in formulating the theory that the dominant factor in postoperative disease of the lung is bronchial obstruction. Once the obstruction is established the fate of the lung parenchyma will depend upon the accompanying conditions, largely upon the nature and the virulence of the microbes present in the exudate. Upon these factors will depend whether the condition remain a simple atelectasis or go on to the development of pneumonia, pulmonary abscess, or gangrene.

The work of Yandell Henderson and his collaborators, particularly Dr. H. W. Haggard, on the physiology of respiration, and in introducing the use of carbon dioxide inhalation in the treatment of various types of asphyxia, has as an after effect done much to clarify the present problem. Some twenty years ago he introduced a method for the treatment of carbon monoxide asphyxia which has now come into general use. It consists of the inhalation of oxygen containing five percent carbon dioxide. As a result of their prolonged campaign of education some thousands of the inhalators are now in the hands of coal-mining companies, city gas companies, chemical manufacturers, and city fire departments, and are on a few hospital ambulances. Before this method was introduced it was a common occurrence, if the patient survived the asphyxia, for him to develop pneumonia. It was, therefore, a suggestive fact that among cases treated by inhalation of carbon dioxide, postasphyxial pneumonia did not occur. Among hundreds of cases thus treated there is not a single report of a subsequent pneumonia. This was unforeseen and at first unexplainable, for evidence demonstrates beyond question that carbon monoxide is not a pulmonary irritant. In such cases the probable sequence of events is that under asphyxia there is shallow breathing and considerable areas of the lungs remain unventilated. The bronchioles leading to such unventilated areas may become occluded by the accumulating secretions from their walls. The air within the alveoli is then gradually absorbed. Thus any area which is not from time to time distended with air tends to become atelectatic. In those portions of the lungs which are obstructed and collapsed, pneumonia develops.

The reason for the use of oxygen, either pure or in mixture, in the inhalators, is that this gas tends to displace carbon monoxide from the blood more rapidly and effectively than does air, which contains only twenty-one percent of oxygen. It is of critical importance, if the victim is to be restored to health and to suffer no after effects from

asphyxia, that the carbon monoxide shall be eliminated from the blood and exhaled from the lungs as quickly as possible. The reason for the use of carbon dioxide with oxygen is to stimulate deep breathing. It thus causes a larger volume of oxygen to be inhaled and aids greatly in displacing carbon monoxide from the blood. Oxygen is not a respiratory stimulant; it may even depress respiration. Carbon dioxide, on the contrary, is effective, even in profound asphyxia, in restoring full, deep breathing.

It is now some years since physiologists have given up the idea of neurogenic respiratory regulation, that it was essentially due to afferent stimulation, and have adopted the chemical theory that carbon dioxide is the respiratory hormone. From the work of Haldane and his associates, and from that of others who have confirmed and extended it, it is as certain as anything in the whole range of modern science that respiration is under chemical control by the more or less direct action of the arterial blood, chiefly through its content of carbon dioxide on the respiratory center of the brain. It has been proved that oxygen is not a stimulant, a fact which clinicians seem to find extremely hard to appreciate, for they are continually trying to stimulate respiration with oxygen. Asphyxia is usually thought of as a condition of oxygen deficiency and excess of carbon dioxide. This is a misconception; asphyxia usually, as in typical carbon monoxide poisoning, involves both low oxygen and low carbon dioxide content in the blood and tissues. Haldane, in a masterly review of the subject, concluded that under normal conditions breathing in man as regulated by the carbon dioxide pressure in the alveoli, and a very slight increase or diminution in the CO_2 pressure suffices to cause a very great increase or diminution in breathing, both in rate and depth.

At about the same time that Henderson and Haggard introduced their treatment for asphyxia they also introduced inhalation of carbon dioxide in surgical anæsthesia. The purpose of such inhalation at the termination of anæsthesia is the same as in carbon monoxide asphyxia; namely, to increase the ventilation of the lungs and thus to hasten the elimination of the anæsthetics after anæsthesia, as of carbon monoxide after asphyxia. However, the accessory and wholly unlooked-for effect of preventing collapse of the lung and pneumonia after anæsthesia and operation is of much greater importance. Reports from various surgical clinics, both in this country and in Germany, where routine hyperventilation during or at the close of operation has been carried out, has greatly diminished the incidence of atelectasis, and also the other serious postoperative pulmonary complications. W. J. Merle Scott, of Rochester, and Elliot C. Cutler, of Cleveland, have been especially industrious in studying the condition and in making case reports, and enthusiastic in advocating hyperventilation with carbon dioxide at the close of operation.

So far we have been chiefly considering the question of prevention of massive collapse. We shall now consider briefly what should be done after it has occurred. Lee deserves credit for first suggesting any treatment which seemed to have a favorable effect on fully developed massive atelectasis. On the basis of the assumption that the obstruction in the respiratory tree occurred in the main bronchi, Chevalier Jackson and Lee advised bronchoscopic aspiration, and in several cases carried out the procedure, with improvement both in the patient's condition and in the degree of atelectasis present. There was a marked tendency for recurrence of the atelectasis, for which they sometimes repeated the bronchoscopic measure. However, their few clinics in which bronchoscopy on a patient with marked respiratory distress and a pulse rate of 150 to 160 per minute can be viewed with indifference as a procedure of election.

An extremely simple measure was advocated by L. R. Sante, of St. Louis, who published an article in *J. A. M. A.* May 14, 1927. He advised rotating the patient on the unaffected side, and reported striking improvement in some cases. It was found that the dependent lung was always the one affected. Assuredly then, in those postoperative cases of pulmonary complications with cardiac displacement, as soon as the latter fact is ascertained, the patient should be turned on the unaffected side. In cases with no cardiac displacement, the position of the patient should be frequently changed.

Scott and Cutler have also used the therapeutic hyperventilation with carbon dioxide early in the course of those cases in which massive atelectasis has already developed, and found that it produced immediate striking benefits. Roentgenograms were obtained just before and just after treatment, and in each case of uncomplicated, unilateral, massive atelectasis, marked immediate improvement was noted. In all cases, at the close of therapeutic hyperventilation, the patient was kept lying on the relatively unaffected side. No patient in the series so treated has had any important symptoms of massive atelectasis for more than twenty-four to forty-eight hours, whereas it was common before the institution of these measures for the serious symptoms to extend over a period of a week or more.

From the striking influence of hyperventilation of the lung by carbon dioxide inhalation in preventing postasphyxial pneumonia, and in preventing postoperative pulmonary collapse and pneumonia, it would be but a natural step to inquire what influence the inhalation of carbon dioxide would have on the course of an ordinary medical pneumonia. And much work along this line has indeed been done, both clinically and on experimental animals, and this method holds forth much promise in the future treatment of pneumonia.

Henderson states: "The problem of pneumonia is peculiar. The pathogenic organisms involved are as well known as those of typhoid and diphtheria. Yet the mortality from these diseases has been reduced far toward the vanishing point while the mortality from pneumonia per hundred thousand of the population is almost the same as it was fifty years ago. This lack of progress in the prevention and cure of pneumonia is the more noteworthy in view of the fact that the problem has been attacked as actively as that of other diseases by many able investigators using the methods of bacteriology, serology, and preventive medicine. Thus the idea suggests itself that pneumonia may involve some factor that is not concerned in the other diseases and is not to be overcome by the methods effective against them. There is such a factor. It is one with which the internist is usually little concerned. For this reason it was long overlooked in pneumonia and has now only come to light through observations on the pneumonia following surgical operations. It is a factor with which the surgeons are familiar; namely, occlusion of an infected organ and lack of drainage. This new conception of pneumonia is that, as the infection takes place by way of the respiratory passages, it is of critical importance to keep these passages open and drained. According as the airways are closed or open, the infection is influenced to become acute or is ameliorated. This influence is exactly the same as that of the drainage or occlusion of a localized infection in any other part of the body."

Pneumonia that is induced in dogs is generally overcome, the lung is redistended and the animal is restored to health by inhalation of carbon dioxide sufficient to cause deep breathing, and continued until the pneumonic area is cleared. Likewise several hundred patients with pneumonia have been treated with oxygen and five percent carbon dioxide by means of the inhalators employed in resuscitating patients with carbon monoxide asphyxia. In the metropolitan area of New York there are now more than 300 of these inhalators and they are used increasingly in pneumonia. In a group of 126 cases, in a recent epidemic of influenza in Pittsburgh, the reports show that only nine patients died, while a number recovered by crisis immediately after the inhalation. Even more important than this low mortality is the fact that the patients treated early nearly all recovered, while the deaths were nearly all among those treated late. In a larger group of patients not so treated the mortality was thirty-one percent.

The objection to the inhalation of carbon dioxide which is most often raised, namely, that it might "strain the heart," may be set aside as invalid, for extensive experience has demonstrated that no such effect of carbon dioxide in physiologic amounts (from five to seven percent) is ever induced. On the contrary, heart strain, which is one of the sequels of asphyxia when untreated, is prevented by the inhalation treatment. Concurrent vasomotor and respiratory stimulation were remarked by Kaya and Starling in spinal animals breathing a mixture of five percent carbon dioxide with no excess of oxygen. They concluded that a moderate increase of carbon dioxide in the blood has no injurious effect on the heart, and may possibly improve the functional capacity of the heart muscle. Further studies by Jerusalem and Starling have demonstrated that there was increased ventricular output with moderate increase in the CO_2 tension of the blood circulating in the coronary system. There was only reduced ventricular output when the CO_2 in the coronary system reached high percentages (twelve to twenty percent of an atmosphere).

In conclusion I would make this brief summary of the technique advised by Coryllos: Immediately at the end of operation, especially if it be abdominal, the patient breathes a mixture containing five to ten percent carbon dioxide and oxygen, for from three to five minutes. This may be repeated every two or three hours after the patient returns to his bed if danger of complication is feared. The patient's position is changed frequently. If collapse or consolidation has already occurred, the use of a tent with continuous oxygen and intermittent carbon dioxide administration is advisable. If recovery is delayed or the lung appears drowned in its secretions, bronchoscopy should be used. This may seem to be a bold measure, but it may be a life-saving procedure.

No new theories or original work are presented in this paper. I have simply attempted to give a brief but comprehensive review of the more recent literature dealing with the subject.

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Discussion

Russell W. Lavengood, M.D. (Marion): According to Doctor Barry, from fifty to seventy percent of the patients subjected to surgical operations will have this pulmonary complication in some form or degree; it might not be a bad idea to invite our surgical brethren in and let them find out all the trouble they have helped start.

The brilliant work of William Pasteur on this subject cannot be overlooked, as his was a great contribution to medical science and what was most outstanding was that he did not have the x-ray to aid him in his work.

The clinical picture of massive pulmonary collapse has been described in detail, but how many of us have recognized this condition when we have met it in our own practice? Is this disease so rare that we will not have an occasional case in a life time? According to the speaker's statistics we should encounter it many times.

Several weeks ago, in my own practice, I had a patient in the hospital who was suffering from typhoid fever. This patient had a tentative diagnosis of acute cholecystitis, made by two very competent men. They had had two negative Widal reactions at a time in the disease when one would expect to find a positive reaction. My colleague and I could hardly make ourselves believe that this was a true cholecystitis. A roentgenogram of the chest revealed the diaphragm quite high and the physical symptoms indicated considerable pathology in the right lung at its base. A large aspirating needle was used and bloody exudate withdrawn which, according to the laboratory report, contained many pus cells. I so strongly believed at that time that we were dealing with pus in the thoracic cavity that we made a small opening between the lower inner costal spaces in the mid-axillary line hoping to find pus that was too thick to be withdrawn by the aspirating needle. None, however, was encountered. The needle was inserted through this opening in through the diaphragm in the hope of encountering perhaps a subdiaphragmatic abscess, or maybe a liver abscess at its dome. Nothing was encountered. All this work was done in the face of a normal leucocyte and differential blood count. Three days later I received my report from the United States Public Health Laboratory at Washington, D. C., which gave me a positive Widal reaction on the specimen of blood which I had sent to them the previous week.

I mention this case only to illustrate the mistake I made from the physical signs and symptoms in the chest. I am firmly convinced that along with the typhoid fever from which this patient was suffering she also had as a complication a massive collapse of the right lung.

The theory as to the etiology of this disease which I think most suitable and very practical is the mechanical occlusion of a bronchus.

How wonderful are the protective influences of nature which has endowed us with that most harassing and annoying symptom, the cough reflex, by which irritating foreign bodies are removed. In this way nature is trying to keep the bronchus from becoming obstructed.

How many times do we see patients who have just been subjected to an abdominal operation who are unable to cough up the mucus which has collected in the throat due to injury and trauma of the accessory muscles of respiration.

The difference between atelectasis and pneumonia are differences only in degree of shrinkage because in the atelectatic lung there is little or no exudate in the alveoli of the affected portion, whereas, in the lung infected by pneumonia the alveoli are filled with an exudate rich in fibrin. To me this seems a very important diagnostic symptom, and in pneumonia we would find the typical prune juice sputum while in atelectasis this would not be present.

The work of Yandell Henderson and his collaborators, particularly Dr. H. W. Haggard, is to be commended. Their work in the physiology of respiration and especially their introductiton of carbon dioxide inhalation in the treatment of the various types of asphyxia, is outstanding.

How many times in the operating room, when we were interns in the hospital, did we hear, "Get the oxygen quickly, the patient is not breathing." From Henderson and his work we learned that carbon dioxide is a stimulant to deep breathing and oxygen is not a respiratory stimulant but may depress respiration.

The treatment of massive collapse of the lung needs no further discussion. As men become better trained and more proficient in the use of the bronchoscope it will not seem such heroic treatment. Every hospital which even pretends to care for surgical or medical cases should have a carbon dioxide inhalation outfit for the hyperventilation of the lung in the cases in which this in indicated.

The pneumonias are still a bugbear to the medical man. Young patients at times react quite favorably, but to the aged pneumonia is, as Sir William Osler has so well put it, "the old man's friend." As the essayist has said, "the pathogenic organisms are as well known as those of typhoid

and diphtheria yet the mortality rate has been reduced far from the vanishing point, and the mortality rate per hundred thousand of the population is almost the same as fifty years ago." This is a most serious indictment against the medical profession.

In the pharmacopeial convention at Washington, D. C., a few weeks ago Reid Hunt, of Harvard University Medical School, referred to the opportunities that lie before the pharmacologic investigator of today, and deplored the lack of adequate support that this science has received in the United States. Hunt reminds us that among the important therapeutic agents added in this period to the pharmacopeia are the arsphenamines, every effective hypnotic, analgesics, such as acetanilid, the salicylates, the nitrites, bromides, the antitoxins and nearly all antiseptics. He adds the unpleasant reminder that the United States has made scarcely a single original contribution to this list. Hunt is responsible for the allegation that "at the present time there is scarcely a university pharmacological laboratory in the United States the equal of a number in Germany forty, or even fifty, years ago."

According to the editor of the last issue of the *Journal of the American Medical Association*, "This is an immediate challenge demanding the earnest support of all who are interested in medical progress." I believe that the day is not far distant when pneumonia will have been conquered and hope that some American physician is going to be its conqueror.

In conclusion, let me ask of the surgeons that they watch the chest as closely as they watch the abdomen that has just been opened and try to make some careful observations about just what we have been discussing.

DERMATOLOGY FROM THE STANDPOINT OF THE GENERAL PRACTITIONER*

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"Unless general medical practice is ultimately to resolve itself into an organization for the allocation of the sick to specialists, it is highly important that every general practitioner should become qualified to meet the commonest of daily situations satisfactorily with respect to diagnosis and treatment." This quotation is taken from an editorial in the *Journal of the American Medical Association* entitled "Common Skin Conditions." Statistical analysis of almost a million cases of skin lesions treated by various clinics within the past fifty years reveals the interesting fact that over two-thirds of all cases were classified in the following short list, given in order of frequency:

Eczema, lues, acne, scabies, psoriasis, seborrhœa, impetigo, urticaria, dermatitis venenata, tinea, alopecia, pediculosis, pruritus, and verruca. In addition, the following groups of diseases of the skin and adjacent mucous membranes are seen commonly by the family physician: pyogenic infections (furuncle, carbuncle, erysipelas), infected wounds, sinus tracts, and fistulæ; infectious granulomata (condyloma, lupus, actinomycosis and blastomycosis); and finally the heterogeneous assortment of neoplasms, premalignant or malignant tumors, and cysts. A list of the latter group would include such commonly observed lesions as the ordinary wen, or sebaceous cyst, and the various stages of sebaceous adenoma, so commonly seen as premalignant epitheliomata about the nose and face. These not infrequently develop into rodent ulcer. Associated with it are senile keratosis spots, which lead to papilloma, epithelioma and finally carcinoma of the squamous celled type. Similar premalignant lesions occur within the oral cavity—the milk white patches at first flattened (leukoplakia), later elevated (papilloma), and still later the highly malignant buccal, alveolar or lingual carcinoma. Epithelioma of the lower lip is commonly seen, and is only slightly less dangerous than that of the tongue.

Malignant warts on the back of the hand are frequently seen in their early stage, offer little difficulty in diagnosis, and to the properly equipped general practitioner very little more difficulty in treatment in the early stage. All too often, these lesions are neglected, or indifferently treated by emollients, or what is worse partially removed by some acid caustic with the result that the neoplastic cells which have just broken through the papillar layer and started to invade the corium are stimulated rather than extirpated. An inadequate physical agent such as "fulguration" is just as inefficient in the majority of cases as the chemical caustic. Any procedure which incompletely removes or destroys a neoplasm is apt to do more harm than good wtih the exception of the actual cautery or modern electrothermic surgery done for purely palliative purposes.

The ideal treatment of any premalignant or early malignant epithelioma requires, first, the establishment of the diagnosis by excision with the electrosurgical scalpel and biopsy; second, the application of sufficient destructive heat, or radiation in the subjacent and peri-adjacent normal tissues to seal the lymphomatics, reverse the flow of lymph circulation, and produce a circumscribing wall of sclerosis with which to prevent the escape of any neoplastic cell that might have remained uninjured. This technic may be accomplished in the office under local or simple gas oxygen anesthesia in a few minutes' time and with a minimum of discomfort and expense to the patient. The after pain is usually comparatively mild and wound healing satisfactory to both doctor and patient. The size of the scar varies directly with the size of the lesion which has been attacked,

*Paper and demonstration clinic before the Fort Wayne Medical Society, October 28, 1930.

and the depth into the subjacent marginal zone to which the operator considers it necessary to dessicate or coagulate in order to be reasonably safe against extension or recurrence. As a general rule, it is far better to err in the side of radical extirpation, than to do an incomplete removal of any neoplasm, whether malignant or premalignant.

Diagnosis of the common skin conditions offers less difficulty than treatment, if the patient is given a careful physical examination with the usual laboratory tests, including direct microscopical examination of smears or scrapings, culture for bacteria and moulds, and serology. Histologic examination of tissue removed determines the question of degree of malignancy if present, as well as the presence or absence of tuberculosis or the fungus infections.

As soon as a tentative diagnosis is made the condition will be classified easily into one of two groups, depending upon whether the etiology is primarily local or constitutional. In the local group are the infections, parasitic infestations, and neoplasm. In the constitutional group are the toxic, metabolic, specific (luetic) and the allergic dermatosis.

Principles of Treatment. Elimination of the underlying causative factor is of course the most important. This may be accomplished in one of three different ways—by the use of medicinal, operative or physical agencies. The latter group, which includes x-ray, radium, electrosurgery, and other forms of radiant and electrical energies are utilized with increasing frequency by dermatologists, but of course not to the exclusion of the older methods. In fact a combination of different agencies is much more valuable in many instances than any one single form of treatment. Since this article purports to discuss the subject of common skin lesions from the standpoint of the general practitioner those conditions which require highly specialistic diagnosis and treatment will not be emphasized. For this reason the use of the roentgen ray, the infraroentgen ray and radium, as well as major operative surgery, will be omitted.

Those physical agencies which the general practitioner will find readily and easily applicable, such as the air-cooled and water-cooled quartz mercury vapor lamp, medical ionization, electrolysis, and the various phases of electrothermic surgery will be emphasized.

Ultraviolet Radiation. This wide zone of the electromagnetic spectrum, consisting of rays of invisible light which are shorter than the violet and longer than the infraroentgen rays is one of the most talked of but least thoroughly understood physical agencies. Scientific investigation within the past few years has proved that this energy is highly essential for proper nutrition, development, growth and health of man and most animals. By the use of certain filters and spectrum analysis certain zones of ultraviolet light have been proven to have calcium fixing properties and are, therefore, of value in those conditions associated with calcium deficiency—notably rickets, osteomalacia, tetany, tuberculosis, and the allergic diseases—particularly the allergic dermatoses, eczema, pruritis and urticaria.

Ultraviolet radiation is a powerful germicidal agency but with rather poor penetrative properties. It will not under ordinary circumstances penetrate beyond the epidermis, or through dirt, greasy ointments, scabs, crusts, or detritus. When administered by compression through a quartz lens the penetrative properties are markedly enhanced. By this technic the primary constrictive effect of ultraviolet can be locally obtained and is important in the treatment of port wine marks (capillary telangiectasis) as well as in the birthmarks composed of larger vessels. The most practical source of ultraviolet radiation for the general practitioner at the present time is the quartz mercury vapor lamp. Heliotherapy or natural sunlight is valuable during certain seasons of the year, but for most skin lesions artificially produced radiation is far more efficient and is always available irrespective of climatic conditions. Ultraviolet irradiation, while not so potent as the roentgen ray in the infectious, parasitic and allergic dermatoses, is nevertheless an instrumentality of steadily increasing value—is relatively much safer to use, and the results in a large variety of chronic eczematous and ulcerated dermatoses is more than satisfactory. With proper safeguards and technic the following skin conditions may be satisfactorily treated:

Eczema, not only in the chronic but even in the acute weeping stage in which it is supposed to be contraindicated. In this disease sympathetico-tropic adjuvants such as adrenalin, thyroid extract and calcium should be used freely. The offending food protein should be ascertained if possible and eliminated from the diet. In those patients apparently made worse by irradiation, the technician will be found most likely to have used the lamp too close to the patient's skin. In this case, the large component of infrared (heat) will have a tendency to produce the opposite effect to the cold short-waved ultraviolet radiation. Cold short waves of light (ultraviolet, irradiation and the x-ray) produce primary vasoconstriction, with decreased permeability of the capillary endothelium. Heat acts in a diametrically opposite manner. In acute eczema a short mild general body irradiation in the absence of heat should be employed.

Acne: In this condition there is both a metabolic (endocrinologic) as well as the local infectious factor. Both local as well as systemic irradiation should be employed.

Furuncle, carbuncle, erysipelas, alopecia areata, and psoriasis are examples of various types of skin lesions in which intensive local and even focal application of the air or water-cooled quartz lamp is of real value. In furuncle and subcutaneous phlegmon drainage may be obtained in a day or two by the use of the three-zone technic—a wide

zone of very mild hyperemia and erythema—which increases the bactericidal index of the general blood circulation (Eidenow). Within this zone is a smaller one of rather marked erythema with vesiculation and desquamation. The innermost zone is the one irradiated the longest and strongest—ischemic necrosis occurs at this site—which may be multiply placed—and from it drainage occurs. In some instances surgical incision is obviated, in others the tissues are softened and fluctuation develops so that the site of the incision may be accurately determined—and be placed within well-localized pocket of pus.

In carbuncle electrocoagulation is usually preferable to all other single methods of treatment, but ultraviolet radiation is an excellent follow-up treatment after excision by the ordinary cold aseptic scalpel. In carbuncle of the upper lip and nose excellent results may be obtained by a combination of electrothermic and radiation methods: likewise, in suppurative otitis externa.

In psoriasis and the various tineas sufficient drastic irradiation must be administered to produce desquamation of the top layer of epidermis surmounting the lesions. Although the results are not so promptly obtained as with the x-ray, the end results are about the same. Recurrences are common in both diseases and when treated by either method. Prophylactic irradiation with quartz light in the winter months is of value in psoriasis. The use of one to four percent formalin in the shoes and on bathroom floors will often prevent reinfection with epidermophytosis after it has been eliminated from the soles of the feet and between the toes by quartz irradiation. Ordinary calamin lotion is of value as an after-treatment in most of the skin diseases which have been treated by ultraviolet irradiation.

There is no objection to the use of sulphur or other ointments in the treatment of scabies and various other parasitic dermatoses. Quartz light irradiation will hasten the progress of the treatment unless the greasy ointment has been applied just prior to the irradiation, in which case it should be first removed by some fat solvent such as benzine or ether before the lesion is exposed to radiation. In pruritus the treatment should be the same as for eczema.

Results in this condition are more apt to be disappointing, however, and do not approach those usually to be expected from the x-ray.

In the treatment of neoplasm, the quartz light is of relatively little value, due to its inability to penetrate beyond the top layer of the skin. After removal of veruccæ, nevi or epithelioma by dessication or electrocoagulation, however, the application of water-cooled quartz light through a quartz rod or lens is valuable in the prevention of keloid, likewise after excision of the latter condition.

Chronic pyogenic ulcer and burns. Perhaps the best primary treatment for an extensive heat burn is the five percent tannic acid dressing. After treatment of the granulations in preparation for or occasionally as a substitute for skin grafting may be done by irradiation with the air-cooled quartz mercury vapor lamp. The marginal zone of advancing epithelium should not be overtreated. Cosmetic appearance of the skin thus regenerated compares favorably with that after Thiersch grafts but the length of time in which the patient is under treatment is much greater. The latter factor is of course much more important in hospital than in office practice.

Electrothermic Surgery and Electrolysis. These methods utilize the destructive effect of electrical currents when they are concentrated within the tissues. Electrolysis is the older method in which the galvanic current is utilized. Its most frequent application at the present date is in the practice of depilation for hypertrichosis. The negative pole is used as the active agency—transmitted through very fine cambric or special depilatory needle generally done for cosmetic reasons only—in certain instances as in entropion, serious ulceration of the cornea may be prevented by this simple little operation. Although not strictly necessary, it is usually better to use a local anesthetic, particularly when working upon the eyelid. Occasionally in spider-like telangiectasia—as about the face and proboscis—the positive current may be administered through a platinum needle, since the positive kation iron would be deposited within the tissues, and combining with sulphur would form the black iron sulphide—a veritable galvanic tattoo. The vasoconstrictive effect of the positive galvanic current satisfactorily obliterates spider telangiectases.

Electrosurgery. The use of various electrothermic methods in general as well as specialistic surgery has grown within the past few years by leaps and bounds. Reference is hereby made to the many articles on this subject. Although the matter of technic is of undoubted importance, and although every case should receive individual attention so far as the application of the various types of destructive thermal energies is concerned, the method is excellently applicable to most of the skin lesions otherwise difficult or impossible to cure. Within the first six months of the current year the writer has treated successfully by one or other form of this technic, under local or general (gas oxygen) anesthesia, in his office: Premalignant lesions of skin, scalp, temporal region, ear, cheek, eyelids, nose, lip, gum, tongue, neck, chest, abdomen, back, leg, ankle and sole of foot: in all sixty-seven cases. Distributed according to diagnosis, as determined from history, examination and biopsy, the following lesions were encountered: (Private cases) epithelioma benignum, seventeen cases; verruca, nine cases; ordinary fleshy moles, eight cases; melanoma, six cases; leukoplakia, four; lingual papilloma, three; fibroma of the tongue, mucous cyst of the tongue, recurrent angioma of the gum, cystic enchondroma, and xanthelasma, one case each. The remaining fifteen cases were distributed through the

following lesions of the female genital tract and ano-perineal region with the following lesions: urethral caruncle, three cases; external hemorrhoids and skin tabs, three cases; abscess of Bartholins gland, two cases; adenofibroma of the vesico-vaginal septum, one case. The remaining cases were on the cervix uteri and were cervical polyp, one (later she had hysterectomy at the hospital); Nabothian cysts, two; and three cases of chronic endocervitis with erosion and hyperplastic appearance suggestive of malignancy, but in all of which the biopsy proved to be negative, and the one procedure was sufficient to establish not only the diagnosis but a clinical cure. The end results in all of the above cases have been more than satisfactory and these patients have been freed from the threat of malignancy with a minimum of discomfort and a maximum of safety.

During this same period of time the following cases diagnosed as malignant (for the most part confirmed by biopsy—and in every case a definite clinical picture of malignancy in the presence of a negative Wassermann) a total of thirty-one cases. Malignancy of the nose, cheek and adjacent eyelid—ten cases. Nine of these are carcinoma—one is spindle celled sarcoma. In two of the cases the entire left half of the nose had to be amputated. Epithelioma of the cheek—temporal region and forehead—six cases. Epithelioma of the extremities—dorsum of the hand, five; heel, one; right forefinger, one. In the latter case amputation was performed through the distal extremity of the metacarpal without resorting to tourniquet or ligature. The wound healed within a month. Squamous celled cancer of the lip, labial and buccal mucosa, five. Squamous celled cancer of the auricle, two. In both cases amputation was necessary and a wide area of scalp resected. These cases require about three months in heaing, if plastic or skin grafting has not been done. In general, it appears to be better to postpone skin grafting or plastic work for at least a year, in order to be able to prevent or detect recurrences. One biopsy for breast tumor was done in the office. The patient was later subjected to radical breast amputation, by electrosurgical technic, and although no local recurrence is present she has definite signs of internal malignancy and is expected to die within the next few months.

These malignant cases have been graded according to the degree of malignancy as determined from the clinical history and examination and the biopsy; two are extremely high grade and are expected to die in the near future; seven are medium grade and recurrence within the next year is probable; the remaining twenty-two are expected to remain alive for the next five years, and perhaps may be found to be cured.

In addition to the infected, septic, ulcerated premalignant and malignant lesions a small series of circumcisions were done for phimosis in gymnastic students of the Indianapolis College of Physical Education. The electrosurgical scalpel was used, and a very fine cutting current administered through a small sharp acusector. Local anesthesia and sodium bromide were exhibited, and there was practically no after discomfort. In no instance was the artery of the frenum ligated. There was no marked bleeding, or discharge. Ordinary gauze or moistened cotton dressings were changed frequently by the student himself. The three or four mattress-on-edge catgut sutures did not have to be removed, and the wounds healed kindly in from twelve to eighteen days. The cosmetic result was excellent. At no time was there any interruption in their gymnastic work. This small series of only nine cases is insufficient to draw any further conclusions, except to show the feasibility of electrosurgical technic in favorable cases of non-infected, non-neoplastic lesions.

Summary and Conclusions:

1. The common skin lesions are readily amenable to diagnosis; treatment by drugs, medicaments and the simpler physical agents in the hands of the general physician may be readily and efficiently applied in his office.

2. Approximately three-fourths of all skin lesions are included in the following list: Eczema, lues, acne, scabies, seborrhœa, impetigo, urticaria, dermatitis venenata, tinea, alopecia, pediculosis, pruritus, and verruca. Pyogenic infections, furuncle, carbuncle, erysipelas, and subcutanous cellulitis. Infected wounds, sinus tracts and fistulæ. Infectious granulomata. Toxic, metabolic and infectious exanthemata. Tumors and cysts—sebaceous cysts, sebaceous adenoma, senile keratosis, cornu cutaneum, and clavus, leukoplakia, papilloma, epithelioma, carcinoma and sarcoma. Vascular and pigmented nevus, caruncle, angioma, cervical erosions, melanoma and other premalignant lesions.

3. In almost every one of the above list, in addition to the indicated drug therapy, the following agencies will be found of value either alone or in proper combination: Electrothermic surgery, either by dessication, coagulation or electrothermic excision.

4. A small series of slightly over a hundred recent electrosurgical operations performed in the office under local anesthetic is given to show the field of practical availability by these methods at this time.

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NASAL OBSTRUCTION*

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Any conditions of the nasal structures which impede the passage of air or divert it from the physiologic route are a part of this subject, though, of course, not all of them can be considered in the time allotted here.

Nasal obstructions may result from developmental anomalies but more often are traumatic in origin. Among prenatal specimens of Hirsch may be seen some that show evidence of oncoming septal deviation, and injuries at parturition must form the basis of some obstructed nasal passages. Early childhood is the most fruitful period, and the voice changing years bring the deficiencies into most frequent prominence.

An inflammatory origin is probably second in frequency, temporary in primary acute form, subacute and chronic after a time, with or without recurrent exacerbations. These are the congestions, intumescences, hypertrophies and hyperplasias. With the latter are associated polypi and new growths, benign and malignant.

Foreign bodies and inspissated secretions may also be mentioned, the former long forgotten at times and as much a surprise to the patient as to the examiner.

The nasal lumina may be sufficient for volume and yet the physiologic function of the nose sadly impaired. In fact, sufficient area may be present in one side when obstruction approaching the point of occlusion obtains in the other, and patients coming for examination frequently are not aware of such deficiency. In other cases more than ample volume of air may pass in circuitous pathologic ways and none of the important functions of modifying the temperature, moisture, and dust content be adequately performed. Especially are these functions of increased and increasing importance with the changed conditions of civilization.

The public asks why so many rhinologists when a half century back it did not seem so to need them and did so well without them. True they did not need so many with direct heating and open fireplaces in residences and places of congregation where the wind swept through, changing room atmosphere at a rapid rate. The purity and moisture of such air was second only to that outside, and the change from one to the other laid no such burdens on upper air passages in these respects as well as regards the temperature. Then again they did not do so well that long ago when forty to fifty percent of children died before the age of twelve and a large percentage of them from air and dust-borne infections. For the dust to be strained in part on its way through the nose is essential to health, and yet that is not all sufficient, as its proper diversion observed in a classical experiment to the sides on its way to destruction in the stomach is a close second in importance.

The reflexes of proper nasal breathing are numerous and important enough to deserve consideration by themselves. Ventilation of and exchange of air from the accessory sinuses mechanically and through the laws of diffusion of gases depend largely upon volume and currents in the lumina. The same applies to the all-important problems of drainage of immediate and associated regions in escaping pathology, and in its relief when present. It may not be too simple to mention the influence of the same conditions on eustachian and other middle ear functions and pathology.

It is not too much to say that a very large percentage of acute nasal pathology and a larger one of subacute and chronic forms arise and persist from faulty nasal passages, and these are obstructions in one or other forms.

As the passageway and the necessary modifier of the most constant and frequently replaced essential for life the struggle towards good function and destruction of pathology is always warranted. No attempt will be made to list all of direct and indirect consequences to that pathology. How many are the serious sequelæ to the common cold to which people with proper nasal breathing are but little subject. If they are as occasionally so affected how evanescent and comparatively easy of relief. Without such quick and complete recovery the avenues of direct extension and transference through vessels too often brings more serious involvement and sequelæ.

Pressure symptoms with their reflexes of headaches, modified vision, and asthma, to name only a few, are sufficient for an important chapter. The self-diagnosed cardiac insufficiency with breathing obstructed this high up, especially in athletes, or with hopes for such is not so rare as to be disregarded. The patient whose family and friends complain of his snoring is nearly always subject to nasal obstruction in some form. Cases of sinusitis, especially beyond the acute types, have in their etiology many bases of obstruction and deflection of air currents and bacteria laden dust deposits.

Diagnosis of nasal obstruction to the tyro would sound and seem so simple that its mention would be superfluous, and yet in its specific practical form its difficulties are not small. To name it is no more definite than to say that a patient has a cough. To find that there is insufficient areaway on one or both sides of the nose is elementary indeed, but to determine with accuracy all the elements contributing to that, their etiology and conditions with clear insight to necessary procedure for relief often taxes real ability to the limit. That its development has been slow and laborious is shown in reviewing the scores of procedures tried and discarded in the last twenty-five years.

The jars of turbinates removed to provide room for septal deviations or to correct the simple hyperactivity of their erectile covering were legion.

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Then the torturing cautery followed with its nauseating, persistent odor of burnt flesh and prolonged period of healing and uncertain results. These and numerous other faultily conceived procedures because the diagnosis was faulty often left the patient with new and less bearable pathology. Fortunate are we of today that we have the experience, good and bad, of our predecessors.

The patient comes to us usually with a very different complaint, that he has "catarrh" or frequent colds, or nauseating dropping in the throat, or headaches, or neuralgia in this region, or has been referred on account of some difficulty of vision, or one or more of many other symptoms sequel to active pathology arising secondary to nasal obstruction.

In the examination of these cases is found what is the basis of this discussion. To make the diagnosis thorough and practicable requires the best of acumen and industry, for upon that depends relief and satisfaction.

To straighten a part of a deflected septum, leaving angular or thickened areas in other parts, is to give less than is needed. Or to remove the angles and thickened areas of this partition and leave other gnarled tissues to minimize the results is lacking in duty and failing in satisfaction. Likewise in our desire to relieve an infective process within the lumen, or in associated cavities grave mistakes are easy in failing to provide such physiologic drainage and aeration as will assure a recovery from that present and give the best safeguard against recurrences.

One of the strange observations made in this field is that for fracture in other parts of the body the surgeon is called promptly, and yet a broken nose is given scant attention and many times overlooked when hemorrhage makes no demand.

This brings up the question as to what can be done for the young, and our ideas have been changing in recent years quite a little. The problems are much the same as in adults, though their solution frequently involves other phases. For instance, normal development physically and mentally must be considered. Physical results have to be considered from both local and general viewpoints, with emphasis on the former, where that which obtains may be more or less the difficulties of correction and the risk involved in the changes required. Much of progress has been made through study of developmental centers and further experience in dealing with patients under twelve years of age. Francis White in a paper before the section on otolaryngology of the American Medical Association, in 1929, gives a very interesting outline of his extensive experience in correcting septal deviations in children, and his methods and technique there detailed are worthy of study and adoption. The writer will not weary you with extensive quotation because the original is had or may be obtained by all and could hardly be improved upon. One salient feature may be emphasized, however, and that relates to the flexibility of cartilage and bone in the young, obviating the removal of much of such structures, and that coupled with youthful rapid healing and repair secures results with less loss of tissue. The importance of such corrections on the general physical and mental development of the child is paramount and the education of the public in this regard is proceeding apace.

Along this line much of value may and should come through the social workers of various organizations, though this is seeming sadly to need better conception of real purpose and ultimate ends. Organizations, even some more directly controlled by the medical profession, should be looking more to the final social independence of the patient and the family and less to the number persuaded to accept charity. Charity, the greatest of the triad, beautiful in conception, beneficent in application, and rich in its purity to the donor, without debasement to the receiver truly covereth and correcteth a multitude of sins. And the medical profession ranks first in contribution to public health. Therefore, it has undisputable right to suggest, even to demand, that these gratuities be under its direction towards individual and collective self-sustaining independence and efficiency, thus avoiding the origin and encouragement of medical mendicants and malingerers.

In conclusion let us keep in mind that nasal obstruction may but does not always need surgery. Hypertrophies are usually amenable to studied topical treatment. Hyperplasia not too long present under appropriate packing and pressure may recede. And when either of these proves recalcitrant the least possible destruction of tissue should be practiced. A large turbinate body rarely calls for total removal, and whenever resection is done, supports should be carefully preserved, as likewise all that is possible of the mucous membrane.

Discussion

H. W. Eby, M.D. (Goshen): The subject of nasal obstruction is a very flexible thing, and doctors differ greatly in their diagnoses. My rule is that if a person has a deflected septum but has plenty of breathing space, or even has a little spur that does not obstruct breathing, it does not amount to anything. I do not have the conscience to tell all patients that they need an operation, because I remember that Hajek said he never saw but one straight septum in his life. Years ago I removed many turbinate bones; now I do not remove so many. If a patient has had adenoids removed late and has a narrow, pinched nose from mouth breathing over a long time, with an insufficient breathing space, I think that it is only fair to that patient to remove part of the turbinate bone; but I think we ought to use our common sense, and our anatomical knowledge, and only remove turbinate bone when it is necessary.

F. V. Overman, M.D. (Indianapolis): Doctor Tomlin's paper is one that deserves a lot of discussion, but the time is short. The paper, like its author, is conservative. I think that the mistake is

often made of advising surgery without serious and mature deliberation. A safe rule is never to advocate surgery on seeing a nose once. Have the patient return and make more than one examination.

HEMORRHAGE OF SUPRARENAL GLANDS FOLLOWING BREECH EXTRACTION

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The information one is able to obtain from standard textbooks concerning suprarenal hemorrhage in the new-born is rather scanty, but there are several complete papers on this subject in the literature.[1] There is considerable doubt, however, as to the etiology of the condition, so that I am presenting a case in which the cause might be trauma.

The mother of the infant, a primipara, age twenty-one, was admitted to the Coleman Hospital November 16, 1930, and went into labor November 20th. She had been a prenatal patient at the clinic since June 20, 1930. Her last menstrual period was December 1, 1929. The pelvic measurements were: intercristal, 26 cm.; interspinous, 25 cm., and external conjugate, 18 cm. The bisischial was 10 cm. The Wassermann was negative. The first week in October she was advised to take castor oil and quinine to induce labor. Evidently the impression was that the baby was big enough at that time. A breech position was known to exist, and a small baby was desirable. Her measurements were reasonable, so that no Cæsarean was ever contemplated. Bag induction is seldom, if ever, advised on overdue primipara at the University Clinic. However, this patient apparently was not overdue, as the baby weighed only seven pounds nine ounces at birth.

The patient had a progressive labor. Pains were good quality, of five minutes in the first stage. The length of the first stage was four hours forty-five minutes. The position was left sacro-anterior. The second stage lasted three hours fifty-two minutes. The baby presented as a frank breech, and the buttocks were allowed to deliver with the aid of an episiotomy. Both arms were above the head. The infant's body filled the birth canal completely, so that great difficulty was experienced bringing down the arms.

The baby was cyanotic, with the heart beating fairly well. It made no attempts to breathe. Carbon dioxide and oxygen were used with artificial respiration for over one hour until the infant could be left alone. The next day it seemed to be all right and continued apparently normal until the third day, when paleness and twitching were noticed; also vomiting of everything taken into the stomach.

A pediatrician saw the case at this time. He found the main symptom to be vomiting. Bile was in the vomitus, but not enough to be significant. Therefore, the obstruction was below the pylorus. The baby was pale, but this might have been due to dehydration. The interne was given permission to do a spinal tap, which was bloody. There was a mass in the right kidney region, which was thought to be possibly a cystic kidney. The pediatrician thought the case one of intestinal obstruction. He advised intraperitoneal saline. The interne did this and drew blood.

The infant was given two transfusions of mother's blood intravenously—one of 80 cc. November 26, 1930 and one of 90 cc. November 28, 1930—but showed no improvement. An operation to explore the abdomen was advised, but the baby died before operation.

Autopsy Report:

Clinical Diagnosis:

Intracranial hemorrhage? Hemorrhagic disease of newborn?

Intestinal obstruction.

Anatomical Diagnosis:

a. Primary fatal lesion:
   1. Massive intraperitoneal hemorrhage from right ruptured adrenal, the medulla of which is the site of a large hemorrhage.

b. Secondary or terminal lesions:
   1. Massive hemorrhage in left adrenal medulla.
   2. Marked pulmonary hypostasis.
   3. Petechial hemorrhage, subepicardial.
   4. Small hemorrhage into submucosa of jejunum.
   5. Moderate meningeal congestion.

Discussion. To the obstetrician the interest in this case lies in the possibility that the damage was due to the breech extraction. Most of the cases of this kind reported up to now have been after normal deliveries. Hamill[2] discusses three cases of his own which had normal deliveries, and reviews the literature in detail. He discovered eighty-seven similar cases. Forty-four came under observation of three men—Spencer, Mattei and Riesman. He gives a long discussion of etiology. Among the probable causes are mentioned asphyxia at birth and traction on the legs, both of which occurred in this case. Of the eighty-seven cases he reviews in detail nineteen were pathological deliveries. Several of these were breech extractions following prolapse of the cord. Three were craniotomies and one case was evidently mishandled.

J. R. Losee[3] is quoted by Farr and Semsroth in the *Archives of Surgery*. In 1924 Losee found nine cases of suprarenal hemorrhage in one hundred and ninety-six still births autopsied. In 1925 on two hundred and nineteen autopsies he found twelve such cases. There was very little brain hemorrhage in these cases.

Dr. Louis Friedman[5] reports a case of laceration of the liver with abdominal hemorrhage. This was after a breech delivery on a primipara. He mentions Holt on suprarenal hemorrhage and Ahl-

feld's case of breech twins born easily with double rupture of the suprarenals.

In 1928 Goldziehr and Greenwald[4] reported two cases. One was a seven-pound-two-ounce baby born after normal delivery and died. The other, born after a difficult forty-eight-hour labor, by low forceps, became ill twenty-four hours later. It had usual symptoms of twitching and tumor mass in hypochondriac region, but improved rapidly after blood transfusion and lived.

Douglas P. Arnold[6] reported four cases in 1930. The first two were normal deliveries, one on a primipara and one on a multipara. Of these two one died and one promptly recovered after a 120 cc. blood transfusion. Of the remaining two cases one was a version and extraction. This case also lived after a transfusion. The fourth, an easy version and extraction, weight six and one-half pounds, cried well at birth, but the third day went into shock with distended abdomen and was diagnosed suprarenal hemorrhage. At autopsy hemorrhages were found in practically every organ in the body, but the main lesion was suprarenal hemorrhage.

This case helps little to solve the problem of the etiology of suprarenal hemorrhage. I have delivered many babies presenting by breech which were harder to extract and which showed no damage. The autopsies on the newborn very often show small hemorrhages in the suprarenals. Most of the cases reported have occurred after normal delivery. This case was well taken care of before labor, and delivered under good hospital conditions. If more autopsies in the future prove breech extraction to be the cause of suprarenal hemorrhage in the newborn there would be a stronger indication for Cæsarean on large babies presenting by breech. It has been suggested that external version should be done on all breech presentations even under ether anæsthesia if necessary.

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PEPTIC ULCER*

A CLINICAL CLASSIFICATION, WITH REMARKS ON DIAGNOSIS AND TREATMENT OF DIFFERENT CLINICAL FORMS AND OF ATYPICAL PEPTIC ULCER IN PARTICULAR

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Cases of peptic ulcer may be divided, from a clinical point of view, into two classes, typical and atypical. The class of typical cases consists of two groups—those without complications and those with complications. Those without complications are either chronic or acute. The complications that may arise are: profuse hemorrhage, pyloric obstruction and its consequences, perforation, visceroptosis, induration, and other less important complications.

The class of atypical cases consists of four groups: ulcers with cardiospasm, ulcers with isolated attacks of painful pyloric spasm, ulcers with only referred pains, and painless peptic ulcers.

The author looks upon every peptic ulcer as being infected because, no matter how clean its bottom may look to the naked eye, the microscope will always reveal a small cell infiltration in the surrounding tissues. It is his belief that this infection of the ulcer not only is responsible for many symptoms but also prevents the healing of the ulcer. Consequently, an antiphlogistic and sedative therapy should be considered of greater importance than an alkaline and neutralizing one, although it is only common sense so to conduct the treatment that no excessive amount of gastric juice is secreted.

Typical Cases of Chronic Peptic Ulcer. The typical cases of chronic, recurrent peptic ulcer without complications are those characterized by periods of antecenal or postcenal and nocturnal, epigastric pains which are relieved completely by food, by alkalis, and by vomiting. For the treatment of these cases the reader is referred to an article published by the author in the *Journal of the American Medical Association*, February 23, 1924, Vol. 82, pages 595-599.

Typical Cases of Acute Peptic Ulcer. We are justified clinically to call a case of peptic ulcer acute when the typical epigastric pain is brought on by almost anything the patient ingests, be it food, liquids, or usual medicines, and when the epigastric tenderness is particularly distinct. The presence of fever, which is not unusual in this kind of cases, is a fair proof that an acute process is going on and it seems only logical to assume that a flaring up of the inflammation in and around the ulcer is the real cause of both the increased sensitiveness of the stomach and of the fever. A case of peptic ulcer may be acute not only during the first attack but also during subsequent attacks. The acute peptic ulcer deserves to be considered as a distinct clinical type for the reason that it does not respond promptly to ordinary treatment.

To insure the healing of an acute peptic ulcer, the patient should be put to bed, a hot poultice should be applied to the epigastrium, and nothing should be given by mouth except water, opiates enough to relieve the pain, and possibly a mild cathartic. After a few days or a week, when the pain is permanently relieved, the tenderness is gone, and the temperature has become normal, bismuth may be given and the usual treatment for chronic peptic ulcer may be resumed.

Typical Cases with Profuse Hemorrhage. The diagnosis of a profusely bleeding ulcer offers no difficulties when the hemorrhage, usually of moderate size, has been preceded by typical ulcer symptoms. In cases where the interpretation of

*Read before the Elkhart County Medical Society, April 3, 1930.

the previous history is doubtful, a differential diagnosis must be made from cancer of the stomach, cirrhosis of the liver, ventricular syphilis, ulcerous gastritis, hemorrhagic uremia, vicarious hematemesis, simple exulceration, and the thrombosis of the portal or splenic vein with the two allied syndromes, splenic anemia and Banti's disease.

It is particularly important immediately to recognize cases of simple exulceration and of portal or splenic thrombosis because they are often rapidly fatal unless surgically treated.

"Exulceratio Simplex" is the name given by Dieulafoy[1] to an acute ulcerous process of the gastric mucosa, of an appearance totally different from the ordinary peptic ulcer. It cannot be detected by palpation because the edges are not indurated and it is difficult to find even after the stomach has been opened. The ulceration seems always to be single and varies in size from that of a ten-cent piece to that of a silver dollar. It occurs in young people, sets in acutely with enormous and repeated hematemesis, runs a febrile course, and is usually rapidly fatal unless treated surgically. Undoubtedly this is a rare disease and only one case has come under my observation.

Portal and splenic thrombosis also cause enormous gastric hemorrhages. They are, as a rule, easily diagnosed by palpation of the spleen. If the spleen is found considerably enlarged and cancer and primary cirrhosis of the liver can be excluded, the diagnosis is practically certain. As the bleeding in these cases is due to the fact that the passage through the splenic and portal veins is blocked and the spleen therefore empties its venous blood through the short gastric veins into the stomach, a splenectomy, eventually in combination with blood transfusion, is immediately indicated because as soon as the splenic vessels are clamped the bleeding stops.

Most cases of profusely bleeding peptic ulcer recover if treated medically with rest in bed, hypodermic injections of morphine sulphate, evacuation of the bowels, and absolute fast for three days after the last hematemesis. In severe cases hemostatic serum, blood transfusion and rectal feeding may have to be used. At the time the patient begins to take nourishment, the ordinary treatment of chronic peptic ulcer may be resumed. Surgical interference is indicated if a second large hemorrhage takes place.

Typical Cases with Pyloric Obstruction and Its Consequences. Obstruction of the pylorus in cases of peptic ulcer may be due to edema, spasm, or scar contraction. The consequences of pyloric obstruction are partly local, partly constitutional. The local consequences are: food retention, more or less continuous gastric secretion, dilatation of the stomach, and, in cases of long standing, complete atony of the gastric wall. The constitutional consequences are: dehydration, emaciation, toxemia as manifested by chemical changes in the blood such as chloride depletion, alkalosis, and nitrogen retention and, finally, in severe cases, by tetany.

Cases of peptic ulcer with pyloric obstruction offer a rather typical clinical picture. After having suffered periodically for years from symptoms characteristic of peptic ulcer, the patient begins to complain of more continuous pain, often located lower down in the abdomen than before, his appetite is poor and constipation is more stubborn than usual. He vomits sour water and old food remnants without getting the customary complete relief because the vomiting act fails to empty the stomach. Neither alkali nor food relieves the pain. The patient often complains of eructation of ill-smelling gases. He loses more or less rapidly in weight. In severe cases, he may have attacks of tetany.

The objective signs confirm the diagnosis which may be surmised from the history and the present complaints. Splashing sounds may be produced over the ventricular area, the larger curvature may be found below the level of the navel, peristaltic waves may be seen going from left to right toward the pylorus, and in rare cases what the Germans call "Magensteifung" may be observed. The definite proof of the correctness of the diagnosis is obtained if the stomach tube is introduced immediately, at the first interview, on the slightest suspicion of pyloric obstruction, and a more or less large quantity of gastric contents, usually of high acidity, can be withdrawn. The degree of toxemia may be ascertained by the chemical examination of the blood.

It is seldom possible to determine at once whether the obstruction is due to scar contraction or to spasm or edema. Visible peristaltic waves indicate scar contraction with fair certainty, but as a rule repeated roentgenologic examinations and a week or ten days' observation are necessary in order to reach a decision.

The first and most important therapeutic measure in cases of pyloric obstruction due to peptic ulcer is to wash the stomach clean; it should be done once and no more. It relieves the pains completely, making the administration of opiates unnecessary, and it gives the dilated stomach a chance to contract. Thereafter the patient is put to bed and given only sips of water by mouth until the gastric secretion has ceased entirely and the stomach has contracted to fairly normal size. This can be ascertained by introducing the stomach tube every morning (for diagnostic purposes only) and by watching the location of the larger curvature. When the stomach is found empty of gastric juice in the morning and when the larger curvature is found above the level of the navel, which may take from one to ten days, food and medicines may be given and the customary treatment of chronic peptic ulcer may be resumed.

During the fast it is of great importance to combat the dehydration and the toxemia by the free use, rectally and intravenously, of solutions of one percent sodium chloride and ten percent glucose, and the tetany by intravenous injections

of five cubic centimeters of a ten percent solution of calcium chloride. Alkalis are distinclty contraindicated in this kind of case.

In cases of pyloric obstruction due to spasm or edema, the patients recover very rapidly under medical management, but should be advised to submit to operation in case of repeated attacks of pyloric obstruction. Surgical intervention is of course indicated whenever a diagnosis of organic pyloric obstruction can be made, but should be deferred until the stomach has had time to contract and until the dehydration and the toxemia have been overcome. The prognosis after the operation is good if the stomach is capable of contraction; it is poor if the stomach wall has lost its tonus.

Typical Cases with Perforation. Perforation of a peptic ulcer takes place most commonly into the free peritoneal cavity and is to be diagnosed partly on the previous history of ulcer symptoms but chiefly on the character of the pain, which is stabbing, not even rapidly increasing in intensity, but reaching its maximum severity from the very first moment, and on the presence of a boardlike rigidity of the entire abdominal wall or, at times, of only part of it, and upon nothing else. If we wait for other symptoms to develop, a very valuable time is lost.

When perforation takes place into the lesser peritoneal cavity, the onset is usually not so sudden, chills are not rare, the temperature rises, and symptoms of abscess formation appear.

Perforation into the pancreas is extremely rare and I have made the diagnosis only once. It concerned a fifty-year-old man with a typical ulcer history who suddenly got an excruciating pain in the center of the back and at the same time profuse hematemesis and melena with only slight fever. As the patient recovered without being operated upon, the diagnosis could not be verified.

All cases of perforating peptic ulcer naturally belong to the domain of surgery.

Typical Cases with Visceroptosis. During the last twenty years a great deal of attention has been paid in the medical literature to cases of partial obstruction of the duodenum, particularly to those due to visceroptosis. The place of obstruction in these latter cases is the lower transverse portion of the duodenum where it passes across and in front of the aorta and behind the superior mesenteric artery, *i. e.,* in the angle formed by these two vessels. It is easily conceivable that a pull on the superior mesenteric artery may cause a pressure on that part of the duodenum and that a ptosis of any part of the bowel that is supplied by the superior mesenteric artery may be responsible for the pull. The resulting partial obstruction of the duodenum naturally will cause a stagnation of the duodenal contents, a duodenitis, a production of duodenal toxins, a dilatation of the proximal part of the duodenum, and finally, in some proved cases, one or often several duodenal ulcers.

Some of the symptoms complained of in these cases of visceroptosis are due directly to the duodenal obstruction, such as bloating, belching, heartburn, nausea, vomiting of more or less large amounts of bile, all of which may be considered to be caused by reverse peristalsis; an almost pathognomonic symptom is the simultaneous vomiting of bile and evacuation of the bowels which presumably is due to the forcing open of both the pylorus and the obstruction by the accumulated contents of the duodenum. Other symptoms are due to absorption of toxins from the duodenum as fatigue, nervousness and its many manifestations, loss of weight, and headache which usually takes the form of migraine. Still other symptoms are observed if an infectious duodenitis occurs, namely, attacks of chills, fever, epigastric pain and tenderness, and vomiting of bile to which may be added jaundice if the infection spreads into the bile ducts. If finally ulcers form in the duodenum, the patient will complain of the characteristic postcenal and nocturnal epigastric pains which are relieved by food, alkalis, or vomiting.

The clinical picture of cases of duodenal ulcer secondary to visceroptosis varies according to the type of visceroptosis. In the juvenile type, the patient usually begins to complain already in adolescence of constipation and of the multitude of symptoms of reverse peristalsis and duodenal intoxication. In the maternal type, the symptoms begin to develop later in life, after one or several childbirths; during subsequent pregnancies the patient regains her health and puts on weight only to see the symptoms recur after the child is born. In both types, the patient complains for years of symptoms of partial duodenal obstruction before the typical symptoms of duodenal ulcer appear.

The diagnosis is based on the history of the case, on the present complaints of typical ulcer symptoms, and on the demonstration of the visceroptosis. The Roentgen examination will with certainty reveal the ptosis but cannot always be depended on to diagnose the ulcer nor the duodenal obstruction itself because of the impossibility of examining the patient during the attack, which might be the only time the duodenum is obstructed.

Patients suffering from duodenal ulcer secondary to low duodenal obstruction should be put to bed with the foot end of the bed elevated from eight to ten inches. Bismuth and mild cathartics may be given from the beginning. They should fast and should be given normal salt solution with glucose rectally or even intravenously until the abdominal organs have gotten back into fairly normal position. After a few days or a week at the most, the ordinary treatment of peptic ulcer may be resumed. After two or three weeks the patient is permitted to be out of bed for a few hours at a time to begin with. He is then advised to take small meals of concentrated food four times daily, to lie down for an hour or two after meals during the next few weeks, to be careful

that he has daily and complete evacuations of the bowels, to wear an abdominal supporter, to take gymnastic exercises particularly of the respiratory and abdominal muscles, and if possible to put on weight.

If a carefully managed medical treatment should fail, a duodeno-jejunostomy is indicated. No other operation is likely to be successful.

Typical Cases with Induration. For the diagnosis of indurated peptic ulcers we are dependent on the roentgenologist. Whenever in cases of long continued ulcer symptoms a characteristic niche or other evidence of penetration is found, we are justified to make a diagnosis of indurated peptic ulcer.

For a number of years it seemed to be a generally accepted opinion that surgery is the only salvation in these cases. During the last ten years or more, however, several reports have been published of cases of this sort which have recovered under medical management. Personally, I have records of a half a dozen healed cases of indurated gastric ulcer and it is my belief that many indurated gastric ulcers will heal under medical treatment while pyloric and duodenal ulcers will not heal.

A patient suffering from an indurated gastric ulcer should be put to bed with hot compresses on his epigastrium for a number of weeks on a very restricted diet which should be very slowly increased; sedatives and analgesics may have to be given for weeks before the pain is definitely overcome; otherwise the ordinary routine of ulcer treatment may be followed. Cases of indurated pyloric or duodenal ulcers should be operated on, not only because they are difficult to heal by medical treatment but because they so very often perforate or bleed profusely.

Typical Cases with Other Complications. Other complications of peptic ulcer than those already described are mentioned here only for the sake of completeness. They are: perigastritis, phlegmonous gastritis, gastric or duodenal diverticulum, hourglass stomach, jejunal ulcer following gastroenterostomy, and gallbladder disease.

Atypical Cases with Cardiospasm. In cases of peptic ulcer with cardiospasm, the patients complain not so much of pains as of symptoms of cardiospasm, *i. e.,* dysphagia, regurgitation of unchanged food without admixture of mucus and, later on, choking when the esophagus becomes dilated and filled with retained food. The diagnosis is often difficult but as a rule a Roentgen examination will exclude cancer, diverticulum, herniation of the stomach through the diaphragmatic hiatus, and pressure from a tumor or from an aneurysm. It remains then to differentiate between a primary cardiospasm without ulcer and a cardiospasm secondary to a peptic ulcer of the cardiac portion of the stomach or of the lower end of the esophagus. An ulcer is very likely to exist if the patient complains of real pain when the food passes into the stomach or if the Roentgen films show an irregular outline of the upper portion of the lesser curvature.

Patients suffering from peptic ulcer with cardiospasm as a rule get well under the ordinary treatment of peptic ulcer. It is advisable, however, to add nitroglycerin to the medication and give a 1/150th or a 1/100th of a grain tablet to be chewed immediately before meals.

Atypical Cases with Isolated Attacks of Painful Pyloric Spasm. It has long been known that pyloric spasm can be extremely painful, but it is perhaps less well known that isolated attacks of painful pyloric spasm may be the single symptom of which patients with peptic ulcer complain. As these attacks occur only occasionally, they are difficult to distinguish from gallstone attacks, particularly as the pain may be so severe as to necessitate the administration of morphine hypodermically, but if a careful history is taken, it will be found that the attacks due to ulcer always come on at the time ulcer pains usually set in, *i. e.,* from one to several hours after meals or shortly after midnight. A further help in the diagnosis is the finding of a distinct tenderness over the pylorus and of occult blood in the stools. The complete recovery after ordinary treatment for peptic ulcer in cases of long standing makes the diagnosis practically certain.

Atypical Cases with Only Referred Pains. Referred pains are not unusual in typical cases of peptic ulcer. They most commonly penetrate to the back or spread upward to the chest and less often downward to the hypogastrium. There are cases of peptic ulcer in which the patients complain, for instance, only of a pain in the back, usually underneath the left shoulder blade, or only of a pain underneath either one of the clavicles or only of a pain in either the right or the left hypogastrium. If a careful history is taken, it will be found that these ectopic pains always come on at the time ulcer pains usually set in, *i. e.,* from one to several hours after meals or shortly after midnight. Often the patient himself has observed that food or alkali gives relief. The finding of epigastric tenderness and of occult blood in the stools and the immediate and complete recovery after ordinary treatment for peptic ulcer in cases of long standing make the diagnosis practically certain.

Atypical Cases of Painless Peptic Ulcer. The existence of peptic ulcers which do not cause pain is well known and is proved by the occurrence of hematemesis or perforation without previous pains as well as by the unexpected finding of peptic ulcers on the operating or necropsy table. These cases have been called "latent" but should, in my opinion, rather be described as "painless" because the patients complain of other symptoms than pain, symptoms which may lead to a correct diagnosis.

Cases of painless peptic ulcer can properly, I believe, be divided into three groups: one group of cases in which the patient complains of symp-

toms referred to the cardio-vascular system such as palpitations, throbbing abdominal aorta, or a dyspnea which is supposed to be due to a reflex spasm in the pulmonary artery; a second group of cases in which the patient complains chiefly of symptoms referred to the nervous system such as general nervousness, hypochondria, or insomnia; a third group of cases in which the patient complains chiefly of symptoms of anemia such as general weakness, fainting spells, or pale or ashy complexion.

It is to be noted that all of these symptoms do occur also in typical painful cases of peptic ulcer but are overshadowed by the more distressing symptom of pain and therefore not taken much notice of. A common characteristic of these symptoms is that they come on or at least are most intense at the time ulcer pains usually set in, *i. e.*, from one to several hours after meals or shortly after midnight. It is not unusual that the patient has found temporary relief by taking food or alkali. The finding of epigastric tenderness and of occult blood in the stools and the immediate and permanent recovery after ordinary treatment for peptic ulcer in cases of long standing make the diagnosis practically certain.

Case Reports. The classification of typical cases of peptic ulcer as it has been outlined above is the one generally accepted by the medical profession and is hardly in need of justification. A classification of atypical cases on the other hand has not been attempted before, at least not one including a description of the different clinical forms of cases of painless peptic ulcer. Therefore a report of some illustrative cases of this kind may be pertinent.

Case 1. *Peptic Ulcer with Cardiospasm.* Mr. Carl A., fifty years old, began to complain in November, 1925, that whenever he drank or ate anything rapidly it would stick at the level of the cardia and he had to vomit it unchanged. Gradually he also complained of a slight pain behind the lower part of the sternum in connection with his meals. After five months, in March, 1926, when he consulted me, he had lost twenty-three pounds in weight.

On Roentgen examination a persistent irregularity of the lesser curvature was found close to the cardia. He was put on the usual ulcer treatment and his troubles ceased immediately. Two and a half months later he had gained fourteen pounds in weight.

Case 2. *Peptic Ulcer with Cardiospasm.* Mr. Sterner S., twenty-four years old, began to complain in May, 1927, that every day about nine a. m. and three p. m. he would have a pain behind the lower part of the sternum and at the same time he became hungry. If he then ate or drank anything, the pain would be relieved. He had to be careful, however, what he ate because if it was dry bread or an apple, it would stick at the level of the cardia and he had to drink one or two glasses of water to make it pass into the stomach. This trouble had kept on periodically for about half a year, when he consulted me in November, 1927.

Roentgen pictures were not taken. He was put on the usual ulcer treatment. Pain and dysphagia disappeared immediately and did not return.

Case 3. *Peptic Ulcer with Isolated Attacks of Pyloric Spasm.* Mrs. Frances O., thirty years old, had been of good health until one evening in the fall of 1913, when she was twenty-four years old, she rather suddenly got an extremely severe pain in the epigastrium penetrating into the back with bloating and tenderness in the epigastrium. She drank a glass of hot water with soda which made her vomit all she had eaten for supper and she was completely relieved. During the following six years she had similar attacks with intervals of from a few days to several weeks. Between the attacks she felt perfectly well.

When she consulted me in December, 1919, I found nothing else abnormal than a distinct tenderness in the region of the pylorus and occult blood in the stools. She was put on the usual ulcer treatment and the attacks never returned.

Case 4. *Peptic Ulcer with Isolated Attacks of Pyloric Spasm.* Mr. Theo. D., sixty-one years old, had had four attacks of very severe epigastric pains when he was thirty-five, forty-five, forty-seven, and forty-nine years old, respectively. Two of the attacks came on at one o'clock a. m. One came on soon after a breakfast and one an hour and a half after a dinner. They were all accompanied by nausea and marked tenderness of the epigastrium and they lasted several hours. Between the attacks he had no gastric distress but since he had the first attack when thirty-five years old, he practically always complained of feeling tired and cold, his complexion was sallow and he could not gain weight. I saw him the first time during the attack when he was forty-nine years old and found a distinct tenderness close to the gall bladder. I made a diagnosis of cholelithiasis and advised him to be operated on, which he refused. His condition remained the same until one day, when he was fifty-four years old, he suddenly became extremely weak and pale and had several large, and bloody bowel movements. He had no pains. The stools were examined for gallstones, but none were found. I began to suspect that his previous attacks of epigastric pains might have been due to pyloric spasm caused by a duodenal ulcer which now was bleeding. He was put on the usual ulcer treatment and immediately began to improve. He gained weight, his complexion became ruddy, and he did not complain of being tired. Now, at the age of sixty-one, he is still enjoying good health.

Case 5. *Peptic Ulcer with Only Referred Pains.* Miss Anna J., thirty years old, complained that since she was twenty-seven years old she had had a pain between the left scapula and the spine

which came on regularly every forenoon at ten o'clock and lasted until she got into bed at night. She had never been conscious of any gastric distress. Medication for rheumatism, massage, and baths had been tried repeatedly without success. Only once had she been free from the pain for a short period during those three years, namely, while she crossed the Atlantic and was seasick. On examination nothing abnormal could be found except a distinct epigastric tenderness and a great deal of occult blood in the stools. From the very first day she was put on the usual ulcer treatment, the pain disappeared and did not return.

Case 6. *Peptic Ulcer with Only Referred Pains.* Mrs. A. C., thirty-three years old, had consulted me when she was twenty-three years old for a pain in her back which I diagnosed as lumbago. The medicine I prescribed at that time failed to relieve her and during these ten years she had suffered almost every spring from the same pain for a period of a month or two. The pain was confined to a small area below the left scapula, practically always came on at about four or five o'clock in the afternoon, was quite severe, often compelled her to lie down, and usually lasted an hour or two. Now, when she was thirty-three, she complained not only of the pain in her back but also of sour eructations, postcenal epigastric pains and vomiting which relieved both the subscapular and the epigastric pain. As she recovered immediately after treatment for peptic ulcer and the pain in her back never returned, I concluded that the latter for ten years had been the only manifestation of a recurrent peptic ulcer.

Case 7. *Painless Peptic Ulcer with Symptoms Referred to the Cardiovascular System.* Mrs. Ph. B., forty-four years old, complained that for three years she had suffered periodically from severe attacks of palpitations with slight epigastric distress and at times heartburn. The attacks came on in the afternoon or in the evening or in the middle of the night and could last as long as an hour. They were particularly severe when she was hungry and could then be relieved by her eating a few crackers. She had had no pains. The stools contained occult blood. As soon as she was put on the usual ulcer treatment the attacks ceased and did not return.

Case 8. *Painless Peptic Ulcer with Symptoms Referred to the Cardiovascular System.* Miss Lydia E., twenty-seven years old, complained that for three years she had suffered occasionally from heartburn and belching coming on half an hour after meals, and that during the last two months she also had had severe pulsations in the epigastrium in conjunction with the gastric symptoms. In fact the pulsations were so severe as to compel her to quit working. She had had no pains. The stools contained occult blood. The pulsations ceased immediately after she was put on the usual ulcer treatment and did not return.

Case 9. *Painless Peptic Ulcer with Symptoms Referred to the Cardiovascular System.* Frank L., forty-three years old, complained that for half a year he had been extremely short of breath on the least exertion. He also had noticed that often in the afternoon he got unusually hungry and at the same time weak and nervous. By eating something he would get immediate relief and therefore he carried a piece of bread in his pocket. On several occasions his stools had been tar-colored. He had had no pains. He looked perfectly healthy and was not anemic. The stools contained occult blood. Two days after he was put on the usual ulcer treatment, the dyspnea was gone and did not return.

Case 10. *Painless Peptic Ulcer with Symptoms Referred to the Nervous System.* John J., forty-nine years old, had in his younger days suffered from epigastric pains which were relieved by vomiting, but since then he had been well until the age of thirty-nine. During the last ten years he had had periods, every spring and fall, lasting one or two months, of nervousness, depression and repeated crying spells which he could not account for. During the last three or four periods he had often awakened in the night with an epigastric distress which was relieved by his drinking some hot water. Shortly after he was put on the usual ulcer treatment his nervousness disappeared and he could sleep throughout the night. He remained well.

Case 11. *Painless Peptic Ulcer with Symptoms Referred to the Nervous System.* James H. B., forty-four years old, a manufacturer, complained that during the last five years, every spring and fall, he had suffered from slight epigastric distress, nervousness, uncontrollable temper, and disturbed sleep. He complained particularly that he could not during these periods control his temper when his stomach was empty. He therefore used to eat a very substantial luncheon and conducted all important business in the early afternoon. After he was put on the usual ulcer treatment he became sweet tempered and slept throughout the night.

Case 12. *Painless Peptic Ulcer with Symptoms Referred to the Nervous System.* Albert W., forty-two years old, complained that during the last six years, almost every spring and fall, for a period of a month or two at the time, he had awakened after midnight with a feeling of nervousness. He had found that if he took a dose of soda his nervousness would be relieved and he could go to sleep. He had had no pains. The stools contained occult blood. From the moment he was put on the usual ulcer treatment the nervousness was gone and he slept throughout the night.

Case 13. *Painless Peptic Ulcer with Symptoms of Anemia.* Einar G., twenty-three years old, complained that for two months he had had fainting spells almost every day, sometimes twice a day. The spells usually came on about two hours

after a meal, most often in the afternoon, and were preceded by a disagreeable sensation in the epigastrium, but he had had no pains. He was pale and the stools contained occult blood. After he was put on the usual ulcer treatment he never fainted.

Case 14. *Painless Peptic Ulcer with Symptoms of Anemia.* Edward J., forty-six years old, had had heartburn occasionally during the last nine years, but had otherwise been feeling well until one afternoon a year before he consulted me. At that time he suddenly became extremely weak, dizzy, and pale. Since then he had not been able to regain his former strength and had lost forty pounds in weight. Only on close questioning did he acknowledge that he had felt a slight epigastric distress three or four hours after meals occasionally and that his stools had been tar-colored at times, but he had had no pains. His complexion was muddy, there was a distinct tenderness in the region of the pylorus and the stools contained occult blood. After having been put on the usual ulcer treatment he improved rapidly, his complexion became clear, he regained his strength and weight and has remained well since then. He is now fifty-eight years old.

Case 15. *Painless peptic ulcer with Symptoms of Anemia.* Miss Fansta U., thirty years old, seamstress, complained that for many years she had had periods, usually in the spring and fall, of what she called "complete exhaustion." During these periods she felt extremely tired, irritable, dizzy, and shortwinded, and her complexion turned greenish pale. A diagnosis of chlorosis had been made and she had taken an enormous amount of tonics, which usually made her feel better for the time being. She considered her stomach to be in good condition but acknowledged that she often had heartburn after greasy food, that at times she became excessively hungry and had to eat something between meals, and that once in a while she would get a pain in her back which was relieved by her taking some food. She had had no epigastric pain. She was very pale and her stools contained occult blood. She was put on the usual ulcer treatment and since then her periods of "exhaustion" have not returned. She is now forty-five years old.

COMMENTS

I freely admit that sufficient proof of the correctness of the diagnosis of peptic ulcer in all of the above reported atypical cases has not been produced. Particularly is this true in regard to the cases of painless peptic ulcer with symptoms referred to the cardiovascular and to the nervous systems, which may have been cases of hyperchlorhydria or acid gastritis. Still a diagnosis of peptic ulcer in these cases is not without its justification inasmuch as we often hear patients with demonstrable ulcers mention the same kind of symptoms although they do not complain of them because the pains are their chief concern. From a practical point of view it is wise to label these doubtful cases "peptic ulcer" for two reasons: the patient will take things seriously when he learns that he has a peptic ulcer and he will recover under the usual ulcer treatment, whether the cause of his trouble is hyperchlorhydria, acid gastritis, or a real ulcer.

The atypical cases of peptic ulcer are of some importance since, according to my experience, between ten and fifteen percent of all ulcer cases belong to that class.

SUMMARY

1. An attempt has been made to give a clinical classification of cases of peptic ulcer, a classification which is intended to be of assistance in the diagnosis and treatment of peptic ulcer.

2. Attention has been called to atypical cases: those with cardiospasm, those with isolated attacks of pyloric spasm, those with only referred pains, and cases of painless peptic ulcer.

(1) Dieulafoy, Georges: *Clinique Medicale de L'Hotel—Dieu de Paris,* Vol. 2; *Paris, Masson et Co.,* p. 1-62, 1897-1898.

LARYNGEAL DIPHTHERIA*

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The purpose of this paper is to present again to the profession one of the most tragic situations known to medicine, together with the generally accepted methods of treatment in the hope that by so doing it will stimulate anew efforts of prevention toward the end of completely eradicating the disease, diphtheria.

Laryngeal diphtheria is commonly called membraneous croup or black diphtheria and is by no means a modern curse. It has been stated on authority (Hoyne) that the much discussed King Tut actually died of diphtheria of the larynx.

The disease has been traced quite accurately almost to the Homeric period of Grecian history, from which time it has never ceased to occur in epidemics.

For many years laryngeal diphtheria was not considered to be a diphtheritic infection and it was not until the work of Bard, an American, in 1770, that the theory was advanced that membraneous croup and faucial diphtheria were but different manifestations of the same disease process. In spite of our efforts at stamping it out it still remains one of the most dreaded diseases of childhood.

Incidence: Diphtheritic laryngitis is almost always a disease of early childhood. The greatest number of cases are seen between the first and fourth year. The youngest case in the writer's experience was an infant four and one-half months, successfully intubated with recovery, while

*This is the ninth of a series of articles sponsored by the Diphtheria Prevention Committee of the Indiana State Medical Association.

the oldest case was almost sixteen years of age.

Seasonal incidence varies with different localities. In this section most cases are seen from January to May.

A very peculiar fact has been noted frequently that the incidence of laryngeal involvement seems to bear no relation to the number of cases of diphtheria in the community, because a relatively large number may occur when there is very little diphtheria present. On the other hand a number of cases approaching epidemic proportions may exist without a single case of laryngeal involvement. Also, this type of diphtheria seems to be more prevalent every third to fourth year.

Types: Invasion of the larynx by diphtheria may be primary or it may occur secondarily to a faucial or nasal involvement and finally it may occur as a simultaneous infection.

Symptoms—The Primary Type: The primary type has no visible membrane and since laryngeal mirrors in young children are difficult to use and highly unsatisfactory, diagnosis must be made by clinical symptoms alone.

The onset, as a rule, is rather insidious, hoarseness, slight or severe, being the first noticeable symptom developing irrespective of day or night. This hoarseness gradually increases in severity during the first three days during which time the child has very little fever (100 to 101) and does not appear ill; in fact, rarely does he stop his play. However, at the end of this first forty-eight to seventy-two hour stage of invasion, cynosis and dyspnœa may develop with such alarming swiftness that death may ensue before aid can be had. When this occurs the pulse becomes very weak and rapid, breathing very labored so that all of the accessory muscles of respiration are brought into play, the alæ nasi dilate, the child becomes extremely restless, looks anxious, tosses and turns constantly in his efforts to breathe and the harsh snoring or sawing respirations of marked obstruction can be heard all over the room. His skin becomes clammy with a cold perspiration, the cynosis gives way to an ashy color and the child dies of suffocation, sometimes in a terminal convulsion. The temperature, which has been low, suddenly rises to 105 or 106 and the pulse rate becomes too fast for accurate counting.

The mentality of these victims usually remains clear until near the end, when stupor intervenes as the violence of the respiratory efforts reach the maximum.

In this primary type there is very little, if any, evidence of sepsis, the reason for this being that absorption of toxins from the larynx is negligible, due to the poor lymphatic supply of the region.

Of course all variations of these symptoms are met within an extended experience. Cases may develop to the point of suffocation within six hours after the onset, while others may go six to ten days before presenting evidence of dangerous obstruction.

Secondary Type: Diphtheritic involvement of the larynx in the course of or following faucial diphtheria presents a vastly different picture. To the symptoms of faucial invasion must be added those of laryngeal obstruction. One of the most confusing of these pictures is in the faucial type neglected until sepsis supervenes and the cervical glands enlarge to cause pressure and edema of the trachea and larynx simulating laryngeal involvement. Obviously accepted methods of relief are of no benefit in such obstruction.

Diagnosis: This should never be confusing or difficult if one remembers two salient points, viz: (1) A croup which does not tend to clear up in the day time, and (2) croup with loss of voice must be considered diphtheritic until proved otherwise.

Since one must rely almost solely upon clinical symptoms in the diagnosis of these cases and since they are usually emergencies, hesitation in the making of a diagnosis may cost a life. If ever in doubt, treatment for the relief of the obstruction should be instituted at once.

Children subject to ordinary spasmodic croup are usually treated with home remedies until obstruction becomes a serious menace before the family realizes the nature of the disease. Another source of incorrect diagnosis is in children who have receiveed toxin antitoxin for immunization but whose immunity has never been proved by a follow-up Schick test. Parents, as well as physicians, consider diphtheria improbable in these children, failing to remember that only a certain percentage of those receiving the antitoxin are really immunized.

Also, because reliable cultures are difficult to obtain and because of the danger in waiting for a report, very little dependence can be placed on this procedure in diagnosis. Even in the presence of a visible membrane cultures may be negative.

Perhaps the most reliable aid in diagnosis is the laryngoscope. By its use the larynx and cords may be visualized and proper cultures taken. Such an instrument is not difficult to use and the information it gives is invaluable.

Lastly, the most reliable aid to diagnosis is the experience of previous cases. No physician who has ever heard the stridor of laryngeal diphtheria will ever mistake it for any other form of croup.

Prognosis: This depends entirely upon how early the diagnosis is made and how efficiently the obstruction is relieved. Even in the hands of experts in large medical centers the mortality is still appallingly high. If antitoxin is administered in sufficient dosage very early (within seventy-two hours), intubation expertly performed and correct post relief care given, any child over one year of age can almost always be saved. Under one year children stand diphtheria of any type very poorly and the mortality is exceedingly high. Also, shock of operative interference, even

though expertly performed, carries a greater and more serious reaction than in older children.

Because of sepsis the secondary and combined types have a higher mortality. Especially common is broncho pneumonia and myocarditis in this type. An idea of the mortality rate may be obtained from the following data:

During a five-year period in the Willard Parker Hospital 1,200 primary laryngeal cases were admitted. Of these only forty-eight percent recovered, although they received the most expert attention.

Of fifty similar cases admitted to the Indianapolis City Hospital during a similar period, twenty-one died.

Treatment: The treatment of laryngeal diphtheria may be summed up in the following brief statements:

1. Relief of the obstruction.
2. The administration of a sufficiently large dose of antitoxin (5,000 to 20,000 units).
3. Proper postoperative care, especially feeding of the patient and giving him sufficient rest.

The relief of the obstruction may be obtained by intubation, tracheotomy or aspiration of the larynx by suction.

Intubation: This is, of course, the method of choice and is seemingly beginning to be one of the lost arts. The profession of medicine and mankind at large owes no greater debt of gratitude to the genius of one man than to that of Joseph O'Dwyer, designer of the intubation tube. Many so-called improved tubes have been attempted, but on close inquiry it will be found that all of these had been tried by him in his many hours of work in the morgue with children dead of the disease.

All medical graduates should be made familiar with these tubes and their use, and there should be in every medical district in every state at least one physician expert in their use.

The relief of laryngeal obstruction by the use of intubation is as dramatic as it is effective.

Tracheotomy: This should rarely ever be necessary in any case of laryngeal diphtheria. It is a bloody procedure at best and increases the mortality greatly.

Any physician who has seen an appreciable number of cases will agree that tracheotomy is rarely, if ever, necessary for the relief of obstruction.

Aspiration of the Larynx by Suction: Repeated aspirations of the larynx by suction is a rather new procedure and in certain types of cases it serves its purpose. In a group of fourteen such cases at the Indianapolis City Hospital twelve were treated successfully in this manner without any other form of operative interference.

The membrane is aspirated by a suction pump through a catheter inserted into the larynx with the aid of a laryngoscope. There is no pain to this procedure and very little shock. However, its use must be confined to those cases in a hospital with the proper equipment.

The entire dose of antitoxin should be given at the first treatment. The amount should be from 5,000 to 20,000 units in the primary type. Because of poor lymphatic drainage about the larynx these cases need less antitoxin than the faucial types.

Absolute quiet must be obtained for the patient after intubation. Morphine or sodium amytal are drugs of choice.

Feeding is difficult with the tube in place, but is usually given satisfactorily from a nursing bottle with the head slightly lowered. Liquids, of course, are used most often because of their ease of administration.

Tubes are usually left in place five days and replaced if obstruction becomes dangerous.

With our efficient system of rapid transportation most cases of laryngeal diphtheria can be placed in hospitals within a short time where there is special equipment for their care. If hospitalization is done early, diagnosis made early and proper procedures for the relief of the obstruction instituted the mortality can be even lower than it is today. On the other hand, if we vigorously pursue our course of immunization none of these procedures will be found necessary.

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar January 16, 1931)

MEDICAL CASE
"JAKE PARALYSIS"

John H. Greist, M.D.

The medical case for presentation is one of so-called "Jake paralysis." During the months of February, March and April of 1930 there occurred in the Middle West and Southwest an epidemic of a flaccid paralysis involving several thousand individuals who had used ginger extract as an alcoholic beverage. All of these cases were characterized by a marked similarity of symptoms and in all there was a history of having taken some of the ginger extract within five days to three weeks prior to the onset of the paralysis. The majority of cases occurred in males between the ages of twenty and eighty years.[1]

From the fact that ginger extract had been used for beverage purposes previously with no ill effects, the United States Public Health Service came to the conclusion that some adulterant must have been introduced some time during January or February which produced this deleterious action. The adulterated form of extract appeared in eight different brands at approximately the same time and in various parts of the country. After prolonged chemical and pharmacological study of a number of samples of ginger, the toxic ingredient was identified as being tri-ortho-cresyl phosphate. This substance is one of the phenol

group and is used extensively in the celluloid industry.[1]

Comparing the history of these cases it was found that the amount consumed had no effect in the outcome of the case other than one of degree. Cases who consumed no more than one ounce of the extract developed the same type of paralysis that was seen in individuals who used two, three and four two-ounce bottles of the preparation. In the majority of cases the only immediate effect would be the intoxication produced by the alcohol. Occasionally there were some gastro-intestinal disturbances with immediate nausea and vomiting, abdominal cramping, diarrhea and bloody stools. These symptoms usually disappeared within a few days in the few cases where they were present. Then, from five days to three weeks later, usually about ten days, the individual would begin to complain of soreness in the legs and numbness in the fingers or toes. Several days later he would note an inability to move the toes, which would be followed shortly by a bilateral foot drop. When the upper extremities were involved, with weakness in the fingers and wrist drop, these findings developed about a week or ten days following the involvement of the lower extremities and were not so marked. The involvement of the upper extremities extended only up to the elbow. There rarely would be any sensory disturbance, no disturbances of the sphincters, and the vision would remain normal.[1]

The condition, then, seemed to be one of flaccid paralysis involving the distal muscles of the upper and lower extremities, with an involvement of the lower motor neurones and with an unusual localization in the lower lumbar and lower cervical regions of the cord.

This patient was admitted to the hospital on December 15th showing a paralysis of the arms and legs. He gave the history that while in Cincinnati in March of 1930 he had consumed two or three highballs in which Jamaica ginger or "Jake" was used. He experienced no ill effects at the time, but about one week later he and six others who were in the same party developed the characteristic paralysis of the legs and arms which has been described. One member of the party had suffered an immediate gastric disturbance and had vomited at once. He developed no paralysis.

In this patient the legs were first involved, the hands becoming involved about two weeks later. He received hospital care in Cincinnati for sixty-three days and had begun to show considerable improvement at the time of discharge. Contrary to the majority of cases he has experienced paræsthesias and hyperæsthesias of the legs and arms since the onset of the condition.

The past and familial history was irrelevant.

At the time of admission the patient was seen to be a well-developed individual of about thirty-four years. He walked in with crutches and showed a marked steppage gate. Physical examination was negative throughout except for the findings in the extremities. All of these were cold, bluish and clammy. There was a marked muscular paralysis of the anterior dorsal flexors of both legs, and paralysis with contractures and atrophy of the interossei of the hands and extensors of the fore arms. The pectoral and biceps reflexes were present but the ulnar and radial reflexes were absent. The abdominal reflexes were also absent. The patellar reflexes were hyperactive and a pseudoclonus could be elicited. The Achilles reflex was normal. The Babinski and Rhomberg signs were negative. The vibratory sense was intact. Hyperæsthesias and paræsthesias were marked in all extremities.

Muscle-nerve tests were done and revealed an impairment of function of the lower motor neurones. The quantitative determination of the reaction for degeneration showed considerably less involvement than would have been expected with the degree of loss of function which was present. This led to the feeling that nervous regeneration had progressed more rapidly than had muscular re-education. This made the therapeutic problem one of keeping up muscular power by proper stimulation until the nervous regeneration and muscle re-education should have been completed.

Laboratory study was negative in all respects except that a spirochætal infection was discovered. Further questioning revealed that this had been acquired subsequent to his discharge from the Cincinnati hospital. Treatment of this condition has been limited to potassium iodide since it was suggested that either mercury or the arsenicals would tend to interfere with the recovery from the peripheral neuritis.

During his stay in the hospital he has received radiant heat and light to the extremities and sinusoidal stimulations to all the muscle groups involved. In the Occupational Therapy Department he has been receiving some excellent work in muscle re-education. Under this management he has shown steady though slow improvement and we believe he will progress to an almost complete recovery.

(1) Public Health Report, Vol. 45, Nos. 30 and 42.

SURGICAL CASE

Frank B. Ramsey, M.D.

Patient, sixty-two years of age, entered the Robert W. Long Hospital a few days ago complaining of inguinal hernia. Her previous history is negative except for an attack of typhoid fever at eighteen years. She has been pregnant five times, had one miscarriage at six months, and delivered four full-term babies, three of them living and well. During her fifth pregnancy, at about seven months, she noticed a good deal of pain and swelling around the umbilicus. The pain continued during the last two months of pregnancy, but after delivery disappeared, though the swelling persisted. It did not increase much.

Five years ago she was admitted to the Long Hospital for repair of the cervix. At that time she was very obese and it was recommended that she be reduced materially in weight before surgery was done. She did not agree to stay in the hospital at that time and was sent home to reduce. She now returns and she has not had much luck reducing. On admission she weighed 193 pounds. General physical condition was negative. Her abdomen is very large and obese and in the region of the umbilicus there is a large, firm, bluish-red mass about the size of the palm of the hand. That is ulcerated on one side, but does not constitute a hernia. She says when this hernia comes out this mass is pushed ahead and hangs down at the bottom.

The immediate reason for her entering the hospital at this time is the fact that during the last three months this hernia has been strangulated on three occasions, each time so difficult to reduce that she has come to see if she cannot be operated upon.

The laboratory work is practically negative as to blood, but the urinalysis showed one-plus sugar. She was questioned about diabetes and states that about a year ago she began to notice symptoms which she suspected as meaning diabetes, since she had taken care of someone who had diabetes. When she was here five years ago she had no sugar in the urine. Her blood sugar was 381. She is now on a diabetic diet, 50-50-120, which gives a fatty acid glucose ratio of 1.2. This is lower than ordinary and is made low on account of the fat. She does not need fat. It is hoped by placing her on this diet that she will be able to reduce in weight, and if her condition warrants it at the time the weight is reduced, to repair the umbilical hernia.

The growth that appears at the umbilicus is probably malignant, and a good deal of infection around it. If it is found to be malignant, it will probably be impossible to repair the hernia. The problem at the present time is the regulation of the diabetes and the reduction of her weight.

ORTHOPEDIC CASES

George J. Garceau, M.D.

The patient is a white boy, age eight, complaining of a growth of the left arm. Two years ago he broke his arm in the upper third. Fracture healed. Last Thanksgiving he fractured the arm again, according to the history given. The growth in the humerus was first noticed at time of first fracture two years ago. Patient has been well all his life except for pertussis, measles and chicken pox and occasional sore throat. He has had no pain or other discomfort in the arm except at time of fracture. According to the story given, the tumor has at times become smaller, then again larger, but that it has taken two years to attain its present size.

Parents and four other children living and well.

Physical examination reveals a boy about normal in size, fairly well nourished and of normal intelligence. He does not appear sick.

Tonsils are very large but no pus expressed. Except for the growth in the left humerus the examination shows no abnormalities.

The left arm shows a large growth at the upper end of the humerus, fusiform in shape. Skin over the tumor is normal. The left humerus is visibly considerably shorter than the right. Measurements from the acromium to the olecranon are nine and one-fourth and ten inches, respectively. There is slight anterior and lateral angulation of the humerus in the upper third, probably due to the fractures. Function of the shoulder and elbow joints are normal. No tenderness. Tumor is very hard. No crepitation. Surface is irregular but not definitely nodular.

Laboratory work is entirely negative.

X-ray shows a large tumor involving the whole of the upper half of the left humerus. There is marked increase in size of the humerus in all diameters. Anterior and lateral angulation are demonstrated. The whole area is cystic appearing and shows considerable trebeculation. Three areas appear as large cysts. No line of fracture is revealed but fracture probably occurred in the lower part of the tumor. The epiphysis, epiphyseal line and metaphysis appear normal.

No biopsy has been done. Definite differentiation of giant cell tumor from osteitis fibrosa, chondroma and cyst depends on microscopic examination. Giant cell tumors are vascular and resemble granulation tissue. The tissue is firm but friable. The tumor is circumscribed and no infiltration of surrounding structures occurs. Capsule is easily detached. Microscopically the picture shows a mass of fibroblastic tissue, round cells and capillaries. Giant cells may be numerous or scanty and variable in distribution. Cysts are often present and are usually filled with yellowish red fluid.

Giant cell tumors usually appear at the ends of the long bones adjacent to the epiphysis. They do not spread into the epiphysis before ossification but practically always toward the diaphysis. The growth is slow and they are usually discovered after the twentieth year.

Treatment in this case will be x-ray alone, although many excise these tumors, phenolize the cavity and close the wound and follow with x-ray. X-ray alone has given good results in two cases previously reported to this seminar.

Case Report: The patient, a white female, age six, admitted to the hospital complaining of limping. Six months ago she fell from a ladder and struck her hip on the concrete. Injury to the left hip was so severe that she was unable to walk for three weeks. She has gradually improved since but limp has persisted.

Parents and two brothers and sisters living and well. Family history entirely negative.

Physical examination is entirely negative for abnormalities, except for the findings in the left

hip. She walks with a marked limp on the left and the limb is in considerable external rotation. The left greater trochanter is very prominent and lies well above Nealton's line. There is one inch of actual shortening. Trendelenberg's sign is negative. Motion in hip joint is very good except abduction which is very limited.

Wassermann, blood count and urine are negative.

Diagnosis: Old fracture of neck of left femur.

X-rays show a fracture of the left upper femur just proximal to the inter-trochanteric line with a coxa vara amounting to a right angle. There is considerable bony callus formation.

Treatment—Osteotomy at about the line of fracture was done on January 12, 1931. Maintaining the reduction was difficult because the upper fragment tilted upwards when traction of leg was reduced. A Stineman pin was therefore inserted anterior to the Achilles tendon and traction applied. The pin was incorporated in the cast, maintaining the traction. The cast holds the hip in slight extension, full abduction and considerable internal rotation.

X-rays, post-operative, reveal very good position.

Post-operative course has so far been uneventful and prognosis for complete recovery is very good.

OBSTETRICS

Dwight L. DeWees, M.D.

The first case is a woman, age twenty-five, mother of three children. Her complaint on entering the hospital was pain and constant soreness in both lower quadrants, low down. This had been present for the past four years, dating from the birth of her last child. From the same time she dates an irritating, annoying vaginal discharge, worse at the menstrual period. All her life her menses have been irregular, but entirely painless until after the birth of her last child, four years ago. She was married at fifteen and this last child was born when she was twenty-one, so her children had come in rather rapid succession. Since this trouble began, at the menstrual period she had been compelled to go to bed because of the pain, and from time to time she had had chills and increased temperature. Her last period was three weeks prior to her admission to the hospital.

On admission her temperature and pulse were normal; laboratory findings, normal. Pelvic examination revealed the uterus slightly enlarged, in normal position, a nodule on the right side apparently attached to the uterus, a large tender ovary on the left. The laboratory work was negative throughout, including the blood serology.

An exploratory operation revealed the left tube apparently normal; left ovary the size of an orange and filled with a clear fluid; the right about half that size. In the right tube three centimeters from the uterus an unruptured ectopic pregnancy the size of an egg was found.

The next case is a woman thirty years of age who entered the hospital complaining of increased frequency of menstruation with cramps, which were unusual for her, beginning at the menstrual period, which was one week late, in October. At that time she had such severe pains that she was confined to bed. She had had three such attacks. In November she passed large clots. No family history of specific infection. Periods had always been normal. Temperature on admission, normal; pulse, normal; blood and other laboratory findings, normal.

Physical examination, negative, except for findings in the pelvis, which showed a large mass in the left tubular region. She was operated on with a diagnosis of left tube ovarian abscess. At operation a mass the size of an orange was found in the left tube, filled with blood and organized tissue; some old blood was present in the pelvis.

The third case is a patient who was admitted to the hospital as an emergency at seven-thirty in the morning. She is thirty-three years old; had never been pregnant before; married to her second husband about two years ago. The last normal menstrual period was in October of last year. She felt well, and the pregnancy seemed to be normal until the present trouble occurred. At three o'clock in the afternoon of the day before admission, the patient, while sitting at the table, suffered a sudden, severe pain in the lower right side. She lay down on a couch because she was dizzy, but she did not faint. She described the feeling as though the abdomen were greatly distended with gas, and the pains like severe gas pains. Her past history was negative for any cause of this, except that eight years ago she had burning and frequency of urination and passed blood in the urine. She never had a vaginal discharge. Soon after the severe pain she began to bleed rather profusely from the uterus.

On admission, fifteen hours after the sharp pain, she had a blood pressure of 80/60; pulse 110, regular; temperature, normal. On examination the patient was found to be pale, skin normally moist, breathing normal. Abdomen showed a noticeable degree of rigidity with great tenderness on the right side. Pelvic examination elicited pain and tenderness.

The patient was prepared for a laparotomy as soon as possible. The findings were 750 cubic centimeters of clotted blood in the pelvis and right tube, and a mass the size of an orange three centimeters from the uterus. At operation the right tube was removed. The left tube was negative and was left as the patient desires to have children if possible.

I believe this to be the first time in the history of the Coleman Hospital that we have had three ectopic pregnancies in the ward at one time.

PEDIATRIC CASES

Herbert F. Call, M.D.

This patient, a boy, aged eight, was admitted with the following history: Three years prior to admission the patient had recurring attacks of vomiting that had no relationship to meals; he would become nauseated and vomit every four to twelve hours; the attacks occurred about every two months, then they began to occur more frequently, the interval coming down to one month, two weeks, one week. One year previous to admission the patient began to have intermittent attacks of diarrhœa. The stools were grayish and foul smelling, and the bowels moved three to six times a day. These attacks were alternated with periods of constipation. During the periods of constipation the stools were putty-like in color and consistency. The father noticed that this diarrhœa seemed to have some relation to the food the child ate, it being noticed that carbohydrates and fats seemed to bring on the attacks of diarrhœa.

At this time the patient was seen by the family doctor, who placed him on a high protein diet. Two years before the patient's father noticed he was not gaining in weight. At that time he weighed thirty-nine pounds, and on admission to the hospital his weight was forty-one pounds. The family doctor placed him on protein, milk, fat, but he did not stay with this very faithfully.

At the time the patient entered the hospital physical examination revealed a child extremely emaciated, with abdomen greatly distended. His skin was putty-colored, inelastic, with a very small amount of adipose tissue present. On palpating the abdomen, in the region of the umbilicus and lying transversely, we found a mass three by two inches, and what felt like a tumor mass in the right lower quadrant over the cecum. The whole abdomen was tympanic and felt doughy. The laboratory work was negative; red-blood count, normal; hemoglobin, fifty percent. It was suggested that tuberculosis be ruled out. X-rays of the chest were positive for non-tuberculous infection, and there was no evidence of any active tuberculous infection in the lungs at that time. The child was not coughing, so we were unable to obtain sputum specimens. A G. I. series was done, and the x-ray revealed no abnormality. He was sent back for re-examination and again the report was no abnormality. Wassermann was negative.

We obtained surgical consultation and were advised that after a blood transfusion the patient should have an exploratory laparotomy. Two hundred fifty cubic centimeters of blood were given and he was referred to the surgical department for operation. Doctor Wiseman will tell you what was done.

Earle Wiseman, M.D.: The patient was transferred to the surgical department after transfusion all ready for operation, and was operated as follows: Under ether the abdomen was opened by a right rectus incision. On entering the abdomen the omentum was found bound down, but on further exploration a mass or loop of intestine that looked like the stomach was found. Further down in the intestinal tract was found a tumor mass about eight or ten inches long and two or three inches thick. This was nodular and of firm consistency. As Doctor Call has said, x-ray examination after a barium meal showed no abnormality. It seems rather unusual that a tumor with almost complete closure would not show in the x-ray. The microscopic slide of the tumor mass shows a lymphoid structure with some connective tissue stroma.

This tumor mass was removed. The mesentery contained large lymph nodes, which were also removed and a lateral anastomosis done. The post-operative course was rather stormy for the first four or five days. Since then he has had an almost uneventful recovery. He had a slight infection of the wound, but at present his wound is practically closed and he is apparently in better condition than before the operation. We expect soon to begin x-ray treatments in the hope of helping the healing process somewhat.

The prognosis, of course, is practically one hundred percent fatal. The condition occurs in the lymphoid tissue, but most often in the cervical glands, mediastinum, and in the bowel. This condition probably began from Peyer's patches in the mesentery and lymph glands.

POST-OPERATIVE PROTEIN REACTIONS

W. D. Gatch, M.D.

This is a preliminary report on a rather important subject. I have included only cases in which the diagnosis has been proved by the demonstrated absence of infection. The simplest way to get the matter before you is to begin with some case reports, of which I have five.

Case 1: Mrs. E. J., aged forty-two; no children. Physical examination, negative except for uterine myoma and small adenoma of thyroid, and a somewhat accelerated pulse. She was admitted to the Robert W. Long Hospital on September 27, 1926, and on October 2nd a myomectomy was performed removing a fibroid tumor four inches in diameter. The white blood count before operation was 7,700; polymorphonuclears, 74 percent. The temperature rose to 101.4° the evening following operation; next day, 103.2°. At that time the white blood count was 35,400. The temperature reached normal by October 7th, the white blood count then being 7,700. The wound healed by primary intention. The treatment was cold sponges, ice bags and forced fluids.

Case 2: Miss M. F., age forty-one. Physical examination showed an obese patient; heart and lungs normal. Had bleeding fibroids which had been treated by x-ray twelve months before operation. White blood count, 7,700; polys, fifty-eight percent. Hysterectomy was performed at the Methodist Hospital, July 27, 1928. The temperature

that evening was 103°. July 29th, white blood count, 27,750; polys, 94 percent. July 30th, white blood count, 18,000; polys, 85 percent. August 2nd, white blood count, 7,700; polys, 76 percent. She had gaseous distention, nausea and vomiting, and was irrational. The treatment was ice sponges, intravenous saline, carbohydrates. On August 2nd the temperature was normal and the wound healed by primary intention.

Case 3: Miss R. K.; age twenty-six; admitted to the William H. Coleman Hospital November 17, 1929. Complaint, profound jaundice of four weeks' duration, and possible history of gall stones. Physical examination otherwise negative. Bleeding from nose, mouth, vagina and bladder before operation. Bleeding time, six minutes.

K. B. transfusion November 23rd; stone removed from common bile duct on November 26th. No bile seen at operation except white bile. White bils is a secretion of the biliary ducts which is not bile at all. It has but one prognostic import, and that is that the cells are not able to secrete normal bile, and the outlook is rather bad from that standpoint. No stones were found in the gall-bladder.

On November 27th bleeding started from the wound. A transfusion of 550 cc. of blood was given and the bleeding checked a while. Temperature, 102.2°. November 29th, started to bleed again, and on November 30th there was bleeding from the nose and mouth. On this date two blood transfusions were given, 550 cc. at noon and 500 cc. at night; at this time bile started to drain. On December 1st the temperature was 102°, bleeding less; an enormous clot in the wound, but no more bleeding. December 2nd, temperature 103.6°, bleeding less. White blood count, 42,900; polys, 78 percent. December 3rd, temperature 102.8°; December 4th, 102.4°; December 5th, white blood count, 60,400; bleeding time, one minute; December 7th, temperature, 101°; white blood count, 38,350. December 11th, 525 cc. of blood given for grave anemia. The clot was removed on December 12th. No infection, no hernia. The patient was dismissed January 1, 1930.

This was a desperate case. I have no intention of discussing the other interesting features such as hemorrhage. She had a marked protein reaction. She had an enormous blood clot in the wound; just how large I do not know, but it seemed to extend up from the umbilicus. With this febrile reaction—a temperature of 103.6°, the woman was bled white, but the bleeding stopped following massive transfusions and the ordinary measures of hydrotherapy and forced fluids. She had absolutely no infection, no hernia, and was discharged well and has remained well since. You will notice that these patients do not become infected, but they do have a tremendous leukocytosis.

Case 4: Mrs. E. C., age twenty-four. Admitted to the Methodist Hospital January 27, 1930, showing typical onset of collapse. Physical examination revealed an obese patient, very pale; temperature, 93.6°; pulse 88, but rose to 160. There was a doughy mass in the *cul de sac*. Red blood count, 4,080,000; hemoglobin, 79 percent; white blood count, 15,850; polys, 92 percent. Pulse, 140 to 160. The physicians may be deceived in these severe intra-abdominal hemorrhages by the slow pulse. I have seen the pulse down to 70 in a woman with an almost fatal hemorrhage. However, the pulse does not stay down very long.

The blood count in this case did not represent her true condition, which was very grave. There had not been time yet for dilution of the blood. We put her on expectant treatment and the next day the blood count was down to 2,000,000.

To simplify this I will say that this woman was brought in in desperate condition from severe hemorrhage, with a pulse of about 160. We put her on expectant treatment, hoping that the hemorrhage would stop, but the accelerated pulse indicated that the bleeding was continuing. Then we gave her two massive transfusions and immediately operated. We found a left ruptured ectopic pregnancy, and the most enormous quantity of blood I have ever seen in a human abdomen. She left the table in good condition. Next morning at eight I stopped in her room, and thought she was dead. She was black; her pulse was 180-200; respiration, gasping and feeble. I had the nurse take her temperature and it was about 106°. We immediately adopted emergency measures, giving carbon dioxide and oxygen, used ice bags, and started the intravenous injection of salt solution and glucose. She picked up a little, but listening to her chest we found it full of loud squeaks. We than began to give adrenalin, at first in small doses, which did her a great deal of good. Then we gave her one-half cubic centimeter about every hour, and kept that up for several days. The woman was in delirium. Next day the temperature came down to 104°.

Recently I have talked over this subject with Dr. W. W. Duke, of Kansas City, who is perhaps our leading authority on allergic phenomena. We learned that this woman was an asthmatic and was sensitive to some proteid of cattle. I do not know what the prote'd was, but she gave a history that whenever she went about cattle barns she would develop signs of asthma or hayfever. The two donors (we did not know this at the time of the transfusion) worked about a dairy, and the suggestion was made that perhaps that had something to do with her condition. I do not know. Doctor Duke says it is quite possible. At any rate, the patient went on to complete recovery, and there is no doubt in the mind of the internists who saw the patient that it was an allergic reaction of some kind. One proof was the striking benefit she received from the injections of adrenalin. The next case shows the diagnostic importance of protein reaction.

Mrs. S. H., age about thirty-two; admitted to Methodist Hospital November 6, 1928, complain-

ing of abdominal pain, chiefly in the lower part, of several days' duration. There was fever, nausea and vomiting. The physical examination was negative except for distention of abdomen, and mass in lower abdomen. The cervix was soft; no adnexal masses. White blood count on admission, 9,500; polys, 79 percent; red blood count, 2,800,000; hemoglobin, 48 percent. Temperature, 100.4°. November 7th, temperature, 101.6°; other symptoms same. November 8th, temperature, 105.4°; other symptoms same. She was given a transfusion of 550 cc. of blood, and on November 9th the temperature was 103.4°. Operation was performed and ruptured ectopic pregnancy with many clots found. November 10th, temperature 101.6°; November 15th, temperature normal; complete recovery.

This clinical history gives no idea of the gravity of the patient's condition. She was seen by several internists and the diagnostic possibilities were discussed. Two diagnoses were considered. One was pelvic abscess due to pyosalpynx or perhaps a diverticulum of the colon, and the other was ruptured ectopic pregnancy. At operation we found a ruptured ectopic pregnancy with a moderate amount of hemorrhage. On cleaning that out the patient went on to uneventful recovery.

What about the interpretation of all this? With the possible exception of the woman who had the gallstones and jaundice and the woman who had the "cow" asthma, these were probably not true allergic reactions. They are what we would call non-specific protein reactions, and that sort of thing is far more common than we think. Just after I had an experience with some of these cases I began to have post-operative leukocyte blood counts made on all patients, and somewhat to my surprise found that after, say a simple hernia operation, in which the wound healed by first intention, and there was little febrile reaction, there was a tremendous leukocytosis, and almost invariably a rise of total leukocyte count from 18,000 to 25,000, and also an increase in the polymorphonuclear count. This reaction kept up for five or six days or a week and then came down to normal. We selected for this only cases that healed without infection. I think there is every reason to believe that in any wound there may be absorption of proteid material to a considerable extent. You will notice that in the case of massive intra-abdominal hemorrhage, and the case in which there had been a myomectomy, there was a chance for absorption of proteid material. Our minds are so focused upon infection as a cause of every complaint that when we consider the diagnosis we overlook this sort of thing, which I believe is more common than is thought.

I think furthermore that at least two of these cases were saved by the recognition of what was the matter, and by the institution of energetic and persistent treatment. This treatment was the use of adrenalin in small doses repeatedly, control of the pyrexia by ice bags, taking care of the fluid metabolism of the body, and giving morphine in sufficient quantities to control the pain. In other words, conserving the patient's strength. I believe that course of treatment will save most of these patients. I have seen two or three patients that I believe died, not only because of the reaction, but because in making a diagnosis we thought only of infection.

In this connection it might be profitable to call your attention to the fact that after a blood transfusion there are two types of reaction. The first is due to incompatibility of the blood. That is a thing you know instantly, as soon as the patient receives from fifteen to twenty cubic centimeters of blood. There will be a tremendous reaction characterized by dilatation of the pupils, air hunger, and complaint of a sensation of needles all over the body. Of course this reaction is liable to terminate fatally very soon. This reaction can be avoided by proper typing of the blood.

The other type cannot be so avoided and is relatively common. The reaction comes on somewhat slowly, sometimes about the close of the transfusion, or even when the patient is back in his room. It is manifested by hives and patches of hyperæmia. This reaction evidently is due to some proteid condition in the blood of the donor which cannot be detected by the ordinary blood compatibility tests. It has been suggested by Kolmer that the poison is probably proteid material which the donor has absorbed from a recent meal, and for that reason he advises that donors should be starved for five or six hours before giving the blood. The reaction which we observed probably was due to this cause since the donor in each case had eaten a meal before giving the blood. I have never seen any of these reactions amount to very much, but they are disconcerting.

I think it is worth while in every case to inquire before operation whether there is a history of asthma. The recent literature has shown plainly that asthmatics are prone to atelectasis. The woman cited here who had the extreme reaction was x-rayed in the height of the reaction to see if she had an atelectasis, but she did not. The diaphragm on that side was only slightly elevated, and careful examination of the lung revealed no atelectasis.

SPECIAL ARTICLES

THE PRESIDENT'S MESSAGE

JONES-COOPER BILL

The Sheppard-Towner Maternity and Infancy Act, after being in operation for seven years, was repealed by Congress. In May, 1922, the House of Delegates of the American Medical Association declared this Act a product of political expediency and not in the interest of public welfare. It was disapproved as a type of undesirable legislation which should be discouraged. Eight years later

this House of Delegates had found no evidence to produce any change in its views with regard to this Act.

The Jones-Cooper Act for the promotion of the health and welfare of mothers and infants has merely to do with the revivification of the Sheppard-Towner Maternity and Infancy Act. The report of the hearing on this act before the Committee on Interstate and Foreign Commerce, held in January, 1931, comprises 270 printed pages. The evidence presented by the proponents and opponents makes interesting reading, and the high points are as follows:

1. Should the administration of this work be under the United States Public Health Department, or should it be under the Children's Bureau in the Department of Labor? The proponents favored the latter, and yet when carefully cross-examined, they agreed that it would be more properly in the United States Department of Public Health. Such is the universal opinion of the medical profession.

2. As to what if any benefits had accrued as the result of the Sheppard-Towner Act having been in operation for seven years, and the expenditure for the same having been eleven million dollars, it was rather definitely proved that this act did not reduce infant or maternal mortality, anywhere, at any time. It did, however, set up a so-called big machine and after a sufficiently long and fair trial it was demonstrated conclusively that the states were doing the work just as well before this big machine was created as they did under its administration.

3. The argument advanced by the proponents that the rural districts needed the government aid was very successfully combated by statistics which showed that the death rate was less in the rural than in the urban districts.

4. Doctor Woodward, who appeared as legislative counsel for the American Medical Association, stated: "The states were active in their efforts toward the reduction of infant and maternal mortality. They were doing work of one kind or another. The Federal Government came along and said: "Under these conditions we will give you $1,000,000 or $1,240,000, something like that, a year to improve your work if you let us tell you how to do it.' Now if that gift produced any results, it should have shown an acceleration in the rate of decline. It did not do so. It should produce a more rapid rate of decline in the states that submitted to the terms of the Sheppard-Towner Act than in those states that did not do so. It did not do so. With cessation of operations of the Sheppard-Towner Act and the withdrawal of the subsidies there ought to have been a rise in the infant and maternal mortality. No rise occurred. All this does not show that the state health departments were not doing just as good work, and just as much work as before—before the days of the Sheppard-Towner Act—but it shows that this stimulus that was applied by the Federal Government did not increase the efficiency of their work."

It would be well if every member of the Indiana State Medical Association could read the report of the hearing on the Jones-Cooper Act. Unless one has done so, he cannot intelligently argue either for or against the proposed revivification of the Sheppard-Towner Act. President Hoover is a proponent of the Jones-Cooper Act. It has passed the Senate and there is no doubt if it comes before the House that this legislative body will likewise affirm its passage. This does not imply that the medical profession, in its attitude toward this Act, has erred. However, it does imply a most evident lack of concerted efforts on the part of our profession. Such legislative acts cannot be defeated by a mere handful of medical men. Unless we perfect our medical organization, beginning with our component county medical societies and working upward, we may expect in the future to witness the enactment of acts or laws that will not be to our liking.

In an address delivered by ex-President Coolidge on April 16, 1928, he spoke as follows: "There always are those who are willing to surrender self-government and turn their affairs over to some national authority in exchange for a payment of money out of the federal treasury. Whenever they find that some abuse needs correction in their neighborhood, instead of applying a remedy themselves they seek to have a tribunal sent on from Washington to discharge their duties for them, regardless of the fact that in accepting such supervision they are bartering away their freedom. Such actions are always taken on the assumption that they are a public benefit. Somewhere Lincoln said something to the effect that tyrants always bestrode the necks of the people upon the plea that it was for their good. He might have added that the people suffered the rule of tyranny in the hope that it would be easier than to rule themselves. We have built our institutions around the rights of the individual. We believe that he will be better off if he looks after himself. We believe that the municipality, the state and the nation will each be better off if they look after themselves. We do not know of any other theory that harmonizes with our true conception of true manhood and true womanhood." Ex-President Coolidge in his budget messages condemned appropriations such as the Sheppard-Towner Act voted. He said such appropriations ought to be stopped. On the other hand, President Hoover favors the Jones-Cooper Act—and yet his views are in keeping with those of ex-President Coolidge in that he objects to the use of federal funds in the states for emergency relief even in times of distress, such as now exist.

The question that concerns us most is as to whether the Federal Government should in any way encroach on the rights of the states—whether it should appropriate funds for a work that the states can care for themselves. One of our most

precious possessions is local self-government. We should not encourage any encroachment upon the right of our state unless said encroachment be deemed absolutely necessary for the good and best interests of our citizens. I am very sincere in the belief that the State of Indiana is not only competent but that it will gladly care for all of the health problems within its boundaries. I am also sincere in the belief that the Indiana State Medical Association will do everything possible to aid and abet its state health authorities in their efforts to protect and improve the health and well being of all the citizens of Indiana. This is possible and can be accomplished without any Federal aid. Dr. John A. Terrell, representing the International Health Division of the Rockefeller Foundation, stated only recently: "We invariably limit aid to states to new and needed developments. We do not assume any expense that is already operative, but if a new and logical development is proposed, we have been willing to contribute up to fifty percent of the cost for a temporary period, with the understanding that at the first meeting of the Legislature an effort would be made to transfer all or at least a creditable portion of the share carried by the outside agency to the state; and we have not regarded any project that we have aided in the development of the state organization as a success until we as a private agency are completely eliminated as a contributor." According to this statement the Rockefeller Foundation would not regard the Sheppard-Towner Act as a success. Its revivification by the Jones-Cooper Act merely sets up another big machine for aiding the states in a work that all of them can and have in the past performed most creditably themselves.

The State of Indiana does not need any financial aid from the Federal Government in order that its health problems may be cared for more effectively. Our state can finance successfully any and all health problems that may arise within its boundaries. However, its health authorities not only desire but should have the hearty cooperation of the Indiana State Medical Association. The successful solutions of all state health problems must of necessity imply the cooperation of the medical profession. Such a cooperation would have aided in preventing the enactment of the Sheppard-Towner Act, and its revivification by the Jones-Cooper Act would not have been possible. The Indiana State Medical Association has always done splendid work. However, in the future this organization is capable of performing much better work. The day is past when a few men or a few committees composed of medical men can accomplish the task. Concerted action on the part of all the members of the Indiana State Medical Association is the only answer. This organization should at any and all times be fully prepared to offer an opinion either for or against any measure or problem that pertains to public health and welfare, and when such an opinion is presented it should represent the viewpoint of the majority of its members. I am fully convinced that the annual meeting of the House of Delegates does not permit of sufficient time for the thorough and efficient consideration and discussion of the numerous health problems that are worthy of and should demand our most earnest and serious consideration. Medical progress demands a coordinated and concerted action on the part of the medical profession. Continued medical progress in the State of Indiana implies a concerted action on the part of every member of the Indiana State Medical Association.

A. B. GRAHAM, M.D.,
Indianapolis, Indiana.

WOMAN'S AUXILIARY IN NORTH CENTRAL STATES

MRS. JAMES BLAKE
SECOND VICE-PRESIDENT AUXILIARY
HOPKINS, MINNESOTA

According to the Constitution and By-laws of the Auxiliary to the American Medical Association the organization program is carried on by the active work of the vice-presidents. Mrs. Southgate Leigh, of Norfolk, Virginia, is first vice-president and automatically chairman of organization. Due to her location on the map the second vice-president finds herself interested in the destinies of the north-central group of states.

Looking backward with pleasant memories to Detroit, and forward with delightful anticipations to Philadelphia, we find this group of states all doing something of common interest.

In the JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION for January, the Auxiliary president stresses the importance of more constructive work on the part of her organized county groups. "Physicians' wives," she says, in her New Year's address, "hold an enviable position in being privileged to have a part in a world-wide health program, and I would urge every physician's wife to bring before other women *dependable* knowledge and a just appreciation of the real spirit and purpose and actual achievements of the medical profession." So from Indiana we know we are to have constructive work during this year. Physicians as a class are not prone to participate in legislative matters, but when four distinctly separate bills which affect the profession directly are presented during one session of a state's legislature, it is time to be up and doing. Such is Indiana's situation this year, and the physicians of the Seventh District have thought it worthwhile to *instruct* their Auxiliary members on these subjects, so that their influence may be used properly. The Indiana journal never fails to give the Auxiliary space, and it is little wonder that the Indiana women are up and coming when they have such Editorial Notes to enlighten and guide them in their constructive program work as one finds in this same journal.

Kansas is slowly getting a few things accomplished. A world-wide depression has rendered prophets quite fameless abroad as well as at home, but the physician's wife in Kansas is coming into her own. We prophesy that the Auxiliary will climb to the top due to the indomitable spirit of the leaders in that state.

In Illinois the motto might well read, "Builders we are, and builders we must ever be. Builders, not in stone that shelters life, but builders in life." We find good constructive programs of well-balanced educational value; we find a journal over ready to broadcast Auxiliary news, and best of all we find a healthy organization line-up, and an advisory board from their medical society. Several of their county groups are having their members get busy with the "Health Audit Program."

One project of worthy mention comes from Vermilion county on the eastern boundary of the state. The County Auxiliary put on the Health Institute in Danville last November. A member from every agency in the county working out any kind of a health program was included in the personnel of the speakers. It was for just one day, but it was worth 365 as a rouser for Auxiliary work. It really was sort of a Christmas Seal Campaign opening, a get-together of club women, and P. T. A. groups in the county. And what a wise idea for a medical auxiliary to have the head lines in the plans for such a "Health Day."

Wisconsin, Iowa and South Dakota are among the latest states to join the National Auxiliary. Organization is the keynote for their work, and the national study envelopes are offered as program material. Right now if the modern physician's wife needs to get one thing more than another from her organization, it is the knowledge of what is going on in this world, especially the world of medicine. Women are discriminating more carefully in the clubs they are joining. They are asking what membership will mean to them—what they will get out of it. For that reason the subjects for study should be chosen more carefully, and the roll call should be made to count for something more than jokes and quotations from forgotten poets. It isn't a pleasant feeling for a busy mother who rides miles to a meeting to say when it is all over, "I can't say I know any more now than when I started." And so we find these three states getting themselves established on a firm foundation, with the national program envelopes scattered far and wide to aid and encourage Auxiliary members already in and prospective members.

Montana and North Dakota are debating pro and con, but as Mrs. Hoxie said in her Detroit report, "I believe it will be a mistake from now on to organize a new state unless it appears reasonably certain that there is interest enough among the physicians who want the Auxiliary, so they will foster it and stand back of it." And so we leave Montana half hearted about forming an Auxiliary and North Dakota in the air.

We find Michigan giving intelligent cooperation with state and county officials. Women like men are interested in the improvement of civic affairs and healthful living, and are realizing that they need to be armed with a definite knowledge of health laws and public health practices.

Missouri is in a very healthy condition. We find that Mrs. A. B. McGlothan, the president-elect of the Woman's Auxiliary to the American Medical Association, will attend President Hoover's White House Conference for Child Health and Protection to be held in Washington, D. C., February 19th to 21st. Mrs. G. H. Hoxie, the president for last year, also will attend the White House Conference.

Mrs. A. W. McAlester tells us the women of Missouri are finding the study envelopes published by the Education Committee of the Woman's Auxiliary to the American Medical Association most interesting and instructive. The studies on common defects in children and on diphtheria, smallpox and typhoid fever were recommended by the Department of Health in the Missouri branch, National Congress of Parents and Teachers, for use on parent-teacher programs. Eight hundred copies of each were distributed for use in parent-teacher units. Three hundred were requested and supplied for use in parent education classes. Requests are coming in constantly for additional copies of the studies for use by teachers and parent-teacher units. The Department of Public Information of the Extension Division of the University of Missouri is including these studies in its suggested programs for clubs in the Missouri Federation of Women's Clubs, and P. T. A. programs. This department requested back numbers of *Hygeia* for use in such programs. Three hundred copies of *Hygeia* were supplied by women in the state and by the circulation manager, and are being extensively used in club programs. The Missouri chairman of public relations is planning to have a copy of each of the studies, "Common Defects in Children" and "Communicable Disease Control," sent to each county school superintendent in the state. Several of the county auxiliaries are using the study envelopes in their programs.

Mrs. M. P. Overholser, of Harrisonville, Missouri, has been appointed chairman of public relations in the Missouri Auxiliary. This auxiliary maintains a scholarship for a medical student, per capita quotas being assigned to each county auxiliary.

They also have sent in thirty percent of the total number of *Hygeia* subscriptions recorded from all auxiliaries from January 1, 1930, to January 1, 1931. Some county auxiliaries provide *Hygeia* for all of their teachers. Among these are Buchanan, Gentry and Lafayette. Cape Girardeau County Auxiliary has just finished paying a $1,000 pledge to a hospital in the city and is now ready for another kind of work. They are a

live group and certainly work hard to be able to accomplish so many wonderful worth-while things.

Minnesota, the North Star state, has had a busy and successful year on organization. The president and organization chairman have visited over the state and planned meetings and educational programs with many county groups. In October the International Medical Assembly met in Minneapolis, and at this time the Hennepin County Auxiliary celebrated its twentieth anniversary by being hostess for five days to the visiting physicians' wives. A great many social affairs and an educational day, which included a speaker on public health, were features. Hennepin county is having a year with a definite program. Each month a speaker is scheduled, and one meeting during the year is reciprocity day and each auxiliary in the state is invited to send visitors. This group features philanthropic work for TB patients at Glen Lake and does much for the library at the sanitarium. They have helped the medical society furnish their library and clubrooms, spending $1,000.

Ramsey county does much the same work. They have a scholarship fund for medical students. St. Louis county is noted for work in the public relations field. The State Medical Journal gives a page to Auxiliary news. One of the other counties takes care of a nurse's scholarship. The Minnesota Auxiliary has a splendid advisory board and a page in the State Journal. The president will be one of the speakers on the program for the Annual Conference of Secretaries of the Component Societies of the Minnesota State Medical Association, to be held in St. Paul the first week in February. This is the first time the Auxiliary has been asked to take part in this annual affair. Mrs. Hesselgrave's talk will be "Uses of the Auxiliary."

And so closing my review of the work of the North Central group of states may I say again:

Builders we are, and builders we must ever be,
Builders not in stone that shelters life, but
Builders in life itself—ever remembering the future of the world for generations to come depends upon what we *think* and *will* and *do* today.

DIPHTHERIA IN INDIANA IN 1931 JANUARY

The month of January shows the largest number of deaths that has been reported since the Diphtheria Committee has been keeping a check upon these matters—twenty-four. January of last year had eighteen deaths. We are starting out the new year with a thirty-three percent increase over 1930, which established a new record. It is going to require real effort to hold the number of deaths below 137, which was the number for 1930. Interesting is the development of a rather new focus in the southeast portion of the state. Dearborn, Fayette and Ripley counties each report two deaths. This section of the state has been relatively free of diphtheria for some time and in such case we have reason to suspect that there are a large number of susceptible children. It will require real effort to hold down the death rates in this region. Lake county starts the new year with four deaths. We wonder if they are intending to maintain their position at the head of the diphtheria death parade.

Below are the counties reporting deaths for the month of January, 1931:

Carroll	1	Lake	4
Dearborn	2	Laporte	1
Fayette	2	Madison	2
Gibson	1	Marshall	1
Green	1	Ripley	2
Henry	1	Starke	1
Howard	2	Vanderburg	1
Huntington	1		—
LaGrange	1		24

ABSTRACTS

INCOMPLETE DILATATION OF LUNGS AS FACTOR IN NEONATAL MORTALITY

According to YANDELL HENDERSON, New Haven, Conn. (*Journal A. M. A.*, February 14, 1931), the natural stimulus initiating breathing in the normal child at birth can now for the first time be stated on sufficient evidence to be the carbon dioxide produced in its own body. While physiologic theory for many years past has suggested this view, the objection could not be overcome that a nonbreathing child probably has a higher pressure of carbon dioxide in its blood than one that breathes spontaneously. The evidence from the effects of inhalation, as set forth by the author, clears away this objection. It shows that the asphyxiated respiratory center of the newborn, or of a drowned person, requires a much higher pressure of carbon dioxide than does a normal center to stimulate it to respiratory activity. For the asphyxiated new-born child, dilatation of the lungs with a mixture containing a sufficient amount of carbon dioxide in oxygen to stimulate natural breathing is the one really effective method of resuscitation. Inhalation of this mixture is equally important for many children that breathe spontaneously; for among these cases incomplete dilatation of the lung is a common condition, predisposing to pneumonia and causing nearly as large a mortality as stillbirth itself. This inhalation should therefore be administered not only to those infants who require it for resuscitation from asphyxia but to all children, even to those that appear entirely normal, during the first few days of life, as a prophylaxis against continuing partial atelectasis, secondary asphyxia and pneumonia. Every maternity hospital should be equipped with at least a simple inhalator for the new-born, or better with an inhalator suitable for infants and adults as well, so that the mother may also be treated when an anesthetic or narcotic has been used. For deliveries outside of hospitals the city health departments should provide simple infant inhalators to be rented to obstetricians and midwives for the cost merely of the oxygen and carbon dioxide consumed. After a reasonable period of education for obstetricians, midwives and nurses, a legal requirement similar to that for the prophylaxis of blindness should be established. Only under such requirement will the inhalational prophylaxis of atelectasis come into such general use that it may save the greatest possible number of lives.

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EDITORIALS

THE TREATMENT OF ANGINA PECTORIS

Angina pectoris is not an uncommon disease, and in the United States the death rate has been increasing steadily for many years. Probably this is due to the high tension under which many of our professional and business men constantly live, for the disease seldom affects the working classes and women seem to be quite immune. In patients under forty years of age syphilis is an important contributing factor, but whatever the cause arteriosclerosis predisposes to angina, for a majority of the patients have sclerosis, many with very high blood pressure. Business and professional men leading lives of great strain, and eating, drinking and smoking to excess form a large proportion of angina patients. The disease usually is ushered in with agonizing pains, great mental anguish through apprehensiveness, and ends in a tragic death. The fact that an attack may be brought on by physical exertion in almost any form, by emotional excitement, by exposure to cold, or by digestive disturbances, indicates the importance of prescribing a rigid regime for the patient to follow, for those factors which induce an attack should be avoided.

Some observers have said that there is no treatment for angina pectoris, and that the patients do just as well without any drug treatment as they do with it. Such an opinion is a confession of weakness, and lack of knowledge of what can be done to give these unfortunate patients relief, and they demand and should have the most conscientious and intelligent service that we can render them. For instance, the syphilitic cases, and those occurring under forty years of age usually are syphilitic, require vigorous anti-syphilitic treatment over a prolonged period. McCrae (Osler's Practice of Medicine) says that ergotin, grains two, three times per day, has a definite value in vasomotor instability, and that it is well to give all drugs in the dosage found best for the patient. He also says that many patients do well by taking sodium nitrites in one-grain doses three times per day regularly, and carrying nitroglycerine with them so that it can be taken at once (grains 1/100 to 1/50) on any feeling of discomfort and pain. The taking of nitroglycerine and morphine at the first sign of an attack often is successful in preventing severe manifestations, and McCrae says that in the severe type the treatment is concerned with the attack first and the general condition afterward, and that in the attack inhalation of nitrite of amyl may give instant relief. In the recurring terrible paroxysms it may lose its effect, but many patients are relieved promptly and it gives great comfort and confidence to carry the perles. Morphia should be used freely when amyl-nitrite fails, and when the attacks recur with great frequency. Surgical procedures in the main have been disappointing, as it is entirely a question of doubt if the apparently successful cases secure relief from the surgery instead of from therapeutic measures. In the December number of *American Medicine* Vipond says that angina pectoris can be cured providing thirty to sixty grains of potassium iodide are given daily, not in tablespoonful doses, but in a cupful of water which is sipped during the day time. By this method thirty to sixty grains will be absorbed, but by the other method only two grains out of every ten grains are absorbed, which latter amount is absolutely valueless. In connection with the iodide treatment, tincture of belladonna in eight to ten-drop doses is administered three times daily. Several cases of so-called cure are reported, and in explaining the method of treatment Vipond says that he pins his faith to two drugs, potassium iodide and belladonna. He declares that potassium iodide must be pushed or otherwise it is useless. The potassium iodide acts as an alterative and the belladonna dilates the coronary arteries and their branches. The treatment is kept up for weeks and months with no remissions. Amyl nitrite is not required. The patient can work if the work is of a quiet character, such as office work. Excitement, and particularly emotional excitement, should be avoided. Exercise may be taken according to capacity. The author says that by following this form of treatment one can get results that are lasting.

EPIDEMIC POLIOMYELITIS DUE

We hope we are mistaken, but the indications are that an epidemic of poliomyelitis is due next summer. The disease was spread rather widely last fall and then declined as it always does with the approach of cold weather. This indicates that we are in what is known as the pre-epidemic phase of the disease. Boards of health, research institutions and hospitals are making arrangements to be able to take care of the cases. It is believed commonly that the serum of human immune cases is the best therapeutic agent, but there is reason to believe that the pooled serum of the normal adult is also efficacious. This probably is due to the fact that the disease—without paralysis—is much more common than we suppose and explains

why a number of people who have no knowledge of having had the disease are found to be immune. Horse serum made after the Rosenow method still has its advocates and is certainly worthy of a trial if the human serum is not immediately available. It has the advantage of being concentrated and of being a readily available commercial project.

Most important in the treatment of this disease is the earliest possible diagnosis. We shall do well then to get down the old textbooks and brush up on the symptoms so that we may be able to get started with the treatment at the earliest possible moment. Complete bed rest from the very first will in itself prevent a number of cases of paralysis. Poliomyelitis is rare enough that many physicians have never seen a case and are, therefore, considerably handicapped in diagnosis and treatment. Much is being written about it at the present time, and the alert will have plenty of time to be prepared. An extensive epidemic need not be expected before July, though there has been some of it in the state throughout the winter.

THE CURRICULA OF TRAINING SCHOOLS FOR NURSES

A great deal has been written and said, and an increasing adverse attitude is being manifested, against the curricula of training schools for nurses. The lectures are given to the pupil nurses, to the greatest extent, by a selected group from the hospital staff. The outline of the course of lectures is not determined by the staff or the executive personnel of the hospital but in Pennsylvania and many other states is definitely set forth by a state board that controls the registration of nurses.

It is stated openly by the nursing groups that a state board for registration of nurses should consist exclusively of registered nurses, that no physician should be on the board; that the physician has little or no knowledge of the administration of training schools for nurses, and is an obstructionist to some of the ideas that they are imbued should become effective. Some of these plans are not constructive, and are not always to the best interest of the one most concerned, the public, hence the medical member objects.

Naturally a physician on such a board would endeavor to guide the other members in the proper channel, but it is a hopeless situation, because the registered nurses on the state boards represent the nursing group, and therefore work valiantly and diligently to the end that the schemes of their group prevail. This is accomplished by the nurses outvoting the physician members. In some states the nursing groups have succeeded by legislative enactment in having the personnel of their state board consist entirely of registered nurses, as they wished nothing to do with the medical group being represented.

We are continually finding fault with the course of lectures outlined by many of the state boards for nurses. When one calmly and without bias has reviewed the prescribed courses, he cannot but appreciate the absolute ridiculousness of it all. The courses are becoming more and more scientific, to the detriment of the art of nursing. Practical nursing is losing the art that once it boasted. The scientific lectures, to the extent required, are unnecessary and uncalled for in a nurse's training school, in preparation for a registered nurse. After the termination of her training should she desire to enter special fields, the nurse should take the necessary additional academic work demanded by the special field of endeavor.

Medical education had been put over the hurdles to such an extent that every graduate was being turned out an all around specialist, at the expense of the preparation which he should have had, namely, for general practice. And, too, scientific medicine was in the ascendency, and the art of medicine was becoming a lost art. A reversal in medical education has taken place, so that now the student of medicine is being prepared for the general practice of medicine, and after graduation should he elect a special field, then he may take the additional course of instruction exacted to practice the specialty. And, too, it is worthy of note that the art of medicine is being restored. The revamping of medical education was deemed requisite and necessary, and is being accomplished, but nursing education, like the Chinese express, is running wild without anyone in control at the throttle.

The type of examination questions demanded by the curricula of nurses' training schools is a matter of continual comment by the medical profession. Please bear in mind that the applicants admitted to medical schools today, to the greatest extent, are selected from the groups having 3 and 4 years of collegiate preparation, whereas applicants for nurses' training schools are required to have only from 1 to 4 years' high school credits, depending upon the requirements of the state board. With the entrance requirements in mind, it would seem absurd to review the unreasonable demands of the state boards for registration of nurses, in regard to required courses of lectures. We have heard instructors in medical schools, who lecture in nurses' training schools, say that they have given questions to medical students selected from the questions given to the nurses, and were surprised how the medical students had failed to answer them properly. The nurses too had failed to answer satisfactorily all the questions. How can nurses be expected to answer questions that are puzzling to medical students? There is something radically wrong in the state board requirements for the course of instruction in a nurses' training school. The student nurses are being prepared to such an extent that they do not seem to realize the dividing line between nursing and the practice of medicine, and too frequently, especially in

industrial nursing, they openly and flagrantly practice medicine.

We reproduce here an article that appeared in the Clearfield County (Pa.) Medical Society *Bulletin* for December, 1930.

WHY OUR DAUGHTER DID NOT COMPLETE HER NURSING COURSE

There has been a great deal of discussion in current medical journals as to what branches of the medical science and how much of it should be taught in the training schools for nurses. It is generally believed that too much time is spent in classrooms and not enough in the hospital wards. Below is a copy of an anatomy examination given to a first-year class of nurses to determine whether they were qualified to continue their training course. It is not known how many of them passed the examination, but if they did, and the other subjects taught them were as difficult, they should have been given a license to practice medicine:

1. Name the systems of the body. Classify tissue and give an example of each class.
2. Describe the spinal column.
3. Classify muscles; give one example of each class. Name two principal muscles of the arm and state their function.
4. Describe the lungs. What takes place as a result of pulmonary circulation?
5. List the functions of the blood. Compare the structures of an artery, vein, capillary; what blood does the portal vein carry to the liver?
6. Discuss in detail the thoracic duct
7. Name the enzymes of the pancreatic juice and give the function of each one.
8. Name the principal nerve centers of the body and the parts that compose it.
9. Name the excretory organs of the body and give the principal waste products excreted by each.
10. Describe one serous cavity of the body.
11. Define the following: Metabolism, lymph, omentum, foramen, fossa, process, condyloid, sagittal.
12. Describe and locate the temporal bone.
13. List the ductless glands and state the supposed function of each.
14. Name the organs contained in the female pelvis and state the function of each. Describe fully one of these.

As stated these constitute questions given in one subject only, anatomy, but will afford an idea of the type given in the remaining subjects. How many of our medical readers can satisfactorily answer all the questions herewith given, which please remember were for first year pupil nurses?

Who is to blame for the condition of affairs herewith set forth? The medical profession should admit its guilt. It is responsible for not having controlled the affairs of nurses' training schools, in all respects, and should have been on guard in the legislative halls. How long is this condition of affairs to continue before organized medicine will lend its cooperation to aid in its correction?—*Penn. Med. Jour.*, Jan. 1931.

LOVE OF MONEY

On January 15th of this year there appeared an editorial in one of the leading newspapers of Indianapolis entitled "Love of Money". This editorial contained most exalted and noble sentiments decrying the baseness of human character which permitted itself to be dominated by love of money. The murderer, the bootlegger, the hijacker, the racketeer, the bandit are all motivated by this unholy emotion, love of money. "Frauds in business are motivated by the same consuming passion"—this sentence being quoted verbatim. Had the reader of the editorial ceased his perusal of this newspaper at the time, he could well have had the feeling that here was a paper whose ethics and morals were of the highest character. But the reader did not stop here; he turned the page, and, while still under the moral exaltation of a high and noble sentiment, stimulated by the editorial, "Love of Money," his eye fell upon the life-size picture of the "Most Amazing Man in the History of Medicine." Still complacently comfortable with the feeling that a community was fortunate to have a paper with such noble ideals expressed on its editorial page, he did not grasp the significance of the picture. A moment's attention, however, showed the picture to be a part of an almost full-page advertisement of a proprietary medicine—lacking one column, a full page of lies and fraud. The advertisement was not even a clever one; it was flavored with the same type of misinformation and falsehood that one finds in the advertisements in public toilet rooms, and are placed surreptitiously in automobiles, lacking only the obscenity. Turning the page back to the editorial column, one reads again. "Frauds in business are motivated by the same consuming passion."

What else but the love of money would impel a newspaper on the one hand to build up a public confidence in its integrity through the medium of its editorials and, on the other, sell its advertising space to the basest frauds. Here is food for thought. Has a newspaper no moral obligations to the community it serves, the discharge of which requires it to refuse paid publicity to frauds? Is the battle against patent medicine swindles again to be fought? Has "big business" in the form of a patent medicine manufacturer forced its frauds onto the pages of our so-called good newspapers? Verily, verily the "Love of Money" is the root of all evil.

AS OTHERS SEE US

Within the last few years there have appeared in lay publications of large circulation many articles concerning various phases of medical practice. Some of the articles have been complimentary, but more have voiced a spirit of unwarranted criticism. Of much interest to us are the contributions in which the spotlight is thrown upon us and some of our real faults and errors of omission as well as commission are bared to public gaze. Thus in an article in *Harper's Magazine* for February on "Specialists at Large" it is said that unlicensed quacks and the various types of charlatans who practice the healing arts illegally have been driven out of business to a large extent, yet

"the incompetent or the unscrupulous physician whose license gives him complete freedom of action continues to practice any specialty he chooses without effective interference, and the public suffers accordingly." Then comes a severe arraignment of the self-styled specialist who has no special qualifications but who "yearns for the flesh pots of an office practice and bigger fees." The surgeon of the unqualified type comes in for considerable attention, and prominent medical men are quoted to the effect that "there are thirty thousand untrained men performing surgical operations," and that "considerable unnecessary surgery is being done, quite often by physicians with little surgical ability or training. A good part of this bad and unnecessary surgery is laid at the door of the fee splitter whose name, it is freely admitted, "is legion." And THE JOURNAL is quoted as saying, "We wink at the transgressions of fee dividers who have large and lucrative practices and who are supported by a large number of spineless physicians who, figuratively speaking, sell their souls for a mess of pottage." The eminent Dr. Rudolph Matas, of New Orleans, is quoted as having said "there are fifty-seven varieties of bogus surgeons and fee-splitters who under the cloak of an honorable profession are nothing but a band of looters and outlawed camp followers." The writer of the article (Dorothy Dunbar Bromley) then says, "No investigation, unfortunately, can determine what proportion of the one hundred and fifty-two thousand licensed doctors in this country are undeserving of our complete confidence. But no matter how small or how large the proportion, the situation seems to need airing. The very fact that patients and their families are in no position to evaluate a doctor's services gives the conscienceless and the ill-equipped member of the profession dangerous power over life and death."

The field of surgery is given as a most glaring example of malpractice, and reference is made to abortions, appendicitis operations done by incompetent men, unnecessary operations done by the unscrupulous, the operations done on a mistaken diagnosis by the careless or incompetent, and "the multitudinous unnecessary operations done on the female organs by the conscienceless gynecologists." Even the nose and throat specialists come in for criticism because of too free advice concerning necessity for a tonsillectomy, and the dentist is scored for needlessly removing teeth. Commercialism is severely censured, particularly as found in "the surgeon who operates for a price, not for what ails the patient." Severest condemnation goes to the fee-splitters of the profession, and it is declared that "fee-splitting goes on in high places as well as low. When two doctors have an understanding that the operative fee is to be split, the patient does not stand a very good chance of getting an honest examination at the hands of the specialist," and a distinguished surgeon is quoted as saying, "If the surgeon disagrees with the individual who brings the patient to him as to the necessity of a proposed operation, the consignor of the patient is offended because he has in sight his part of the booty. The buyer of the patient, having degenerated to this low form of commercialism, does not wish to offend one upon whom he depends, and the operation is done and the booty divided, but not much more about the condition of the patient appears on paper than about the money paid. Criminals do not like to leave tracks." Another surgeon is quoted as saying, "Much unnecessary poor and mutilating surgery is performed as a result of the pernicious practice of fee-splitting."

Fortunately the writer in *Harper's* says, "I must ask my readers to bear in mind that the evidence presented is not to be applied to the entire medical profession. The last thing that I should want to do would be to undermine the confidence of the public in doctors as a class." To solve the problem, the writer offers the following: "Preaching and the passing of laws will hardly induce the unqualified specialist and the greedy operator not to split fees, since there is no other method by which they can attract a large number of patients. Far more helpful would be a reorganization of the profession which would at least make it impossible for Doctor Tom, Dick or Harry to turn himself into a specialist over night."

We are quite in sympathy with the complaint made concerning the present order of things which permits any graduate to perform the most difficult and dangerous operation, and he usually is willing to do this except for his own conscience or the lack of confidence of the patient. While the medical profession is criticized for taking too few steps to bring order out of chaos, or to classify its members according to special qualifications, yet it is given praise for the effort put forth to distinguish skilled specialists from men who have had only general medical training, through the selective process adopted by the American College of Surgeons, the Examining Board for Ophthalmologists, the Examining Board for Otolaryngologists, and quite recently the Examining Board for Obstetricians and Gynecologists, and it is hoped that other specialties soon may be recognized by similar boards. Such schemes as these will do a great deal to raise the level of the specialties, but, as the writer points out, "the public will be slow to benefit unless it is fully informed of the existence of these hierarchies within the profession. Every public library should have the directories of the various organizations on file, and the newspapers should publish periodically a list of local members. Patients would then at least have the assurance that the specialists whom they consult have been adequately trained in their particular branch of medicine."

No matter how much we may dislike to have the spotlight thrown upon us, yet we must admit that much of what has been said in the article to which we refer is true, and we are sorry to admit

it. The writer in *Harper's* voices a personal sentiment in saying, "The time must come when no doctor will venture to call himself a gynecologist, a laryngologist, a urologist, or any other kind of a specialist unless he has done extensive graduate work in that field, and has been certified by the proper board of examiners. The American Medical Association and, in turn, the state and county medical societies could eventually effect this reform if they would exclude from membership all doctors who set themselves up as specialists without having the proper qualifications. Unless the medical profession cleans its own house in some such manner the state may have to intervene, as it has in Denmark, and forbid a doctor to practice surgery or any other specialty, unless he has taken an examination and been licensed in that specialty. * * * The impetus for the movement must come from the profession itself."

Back of it all, as intimated by the article, there must be a medical conscience. "The future of the medical profession in fact depends upon the future of American manhood."

UNNECESSARY HOSPITAL EXPENSES

One of the readers of The Journal says, in commenting on our complaint concerning inconsistent and unnecessary hospital expenses, that he thinks the medical profession is at fault in not demanding and insisting upon fair play on the part of the hospital when dealing with patients, and particularly patients in moderate circumstances. He goes on to say that some of his patients in moderate circumstances are railroaded into taking expensive hospital rooms by the hospital authorities, even when cheaper rooms are available, and to add to the indignity heaped upon the patient an unnecessary special nurse oftentimes is insisted upon by the hospital, and when leaving the hospital the patient is presented with a bill for a lot of unnecessary and useless laboratory work and medication that is not ordered by the attending physician. Perhaps he is putting the matter rather strongly, but so far as we can learn practices such as are complained of are not at all uncommon although, on the other hand, we know that patients themselves oftentimes, through a sort of psychologic urge and for purely sentimental reasons, demand a lot of hospital frills which are unnecessary and add nothing to the recovery of the patient while at the same time they really are beyond the means of the patient to pay without undue hardship. It seems to us that during this hue and cry about the high cost of illness it is time for the medical profession to speak up in stentorian tones in opposition to the unnecessary and fruitless expense that physicians, hospitals, and the patients themselves oftentimes encourage. We are strongly of the opinion that hospitalization is unnecessary in fully fifty percent of the cases that get into a hospital, and that some of those cases are in a hospital because the attending physician is too lazy to make house calls. We also believe that not ten percent of the hospitalized cases actually need special nurses. Finally, we are of the opinion that there should be less theoretical and more practical training of nurses, and more insistence upon floor nursing in the hospitals, such as we had a few years ago. Today floor nursing in most of the hospitals is somewhat of a kid glove job, and in some hospitals when a floor nurse is asked to do something of real service to patients she feels as if she has been imposed upon if she has to leave her nose-powdering, novel reading and gossiping long enough to answer the call of a patient who for some reason or other has been guilty of the crime of failing to employ a special nurse. This criticism of hospital tendencies is not complete without calling attention to the sins of omission and commission of those physicians who seem to think it is smart to boast of doing nothing but hospital practice, and are too lazy to visit the patients in their homes or to do a little ordinary laboratory work required in the interest of the patient and which all too frequently is turned over to the hospitals that overcharge the patient for the work which the attending physician should do. It is time for some of us to look these facts squarely in the face and change our ways.

MEDICAL QUACKERY IN THE NAME OF RELIGION

A whole lot of offenses are committed and permitted in the name of religion, but one of them deserving denunciation is the practice of using religion to deceive and defraud the sick and suffering. In one of the larger Indiana cities a large tabernacle has been built through contributions which for the most part have been wheedled out of the sick and crippled on the pretense that their diseases and infirmities can be cured through the prayers and religious ministrations of a preacher who is at the head of the enterprise. Most of the sermons and the broadcasting over the radio by this preacher are made up largely of pleas for contributions, based on the claim that the sick and crippled are healed or cured through the prayers of the preacher, who we have been led to believe does not belong to any particular religious denomination but seems to have sprung up like Topsy and through specious claims and under the cloak of religion to have developed a considerable following. The pathetic part of the whole business is that a lot of people who could be helped by appropriate medical services and attention are deluded as to the help that can be given them through the aforementioned preacher, and are led to contribute sums of money which they can ill afford and, on the other hand, there are some incurables, usually ignorant and poor, who are made victims and through pleadings or coercion are led to make contributions of money that bring

no return. As a commercial enterprise the whole thing is a great success, and if the preacher does not give an accounting of the funds received, he ought to get rich, but when we stop to think that the whole enterprise is conducted in the name of religion it seems to us that someone who has a real respect for religion ought to suppress the game.

PHYSICIANS UNDER NO OBLIGATIONS TO INSURANCE COMPANIES

Several times during the last few years we have called attention to the fact that physicians are under no obligation to furnish insurance companies with information concerning patrons, even though paid for the service. The only exception is when ordered by a court to produce the record *in court*. Recently the medical society of the County of Kings, New York, has referred to the common practice of insurance companies in asking physicians for information regarding the diagnosis and other facts relative to the illness for which the physician has been in attendance at one time or another, and the Council on Medical Economics has recommended that a statement concerning the physician's relationship to insurance companies be published, which statement we recommend for the careful perusal of our readers, and is as follows:

"It is hardly necessary to report that all communications between patient and physician are privileged—and that this privilege must ever be held sacred and inviolable.

"The information on the usual death certificate is sufficient for a beneficiary as legal 'proof of death.'

"Even if *notarized* consents are forwarded by an insurance company to a physician such consents have no weight with the physician. It is recommended that before giving such information as is therein requested the doctor have a *personal* interview with such beneficiary—this refers *especially* to physicians who have attended deceased prior to the last illness of deceased.

"Hospitals, under the law of privileged communications, may not permit copy or inspection of the record of a patient. The only way such inspections may be secured is by an order of a court to produce such record *in court.*"

IN Denmark the state has laid down the requirements for the training of specialists, and forbidden the assumption of title of specialist by anyone who has not had suitable training, and is adding rigorous requirements for the continuous education of those who lead in the medical practice of that country. We should adopt a similar plan in this country. We have the facilities. Medical and surgical practice would have a new meaning and command greater respect when we do away with so much service by the incompetent who now are posing as specialists.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

THE physician always has been the last one to be paid. In times of depression he suffers more than anyone else. He may do a large volume of work, but it is quite another story to get pay for it. However, we are proud of the tradition which requires medical men to give service to the deserving whether paid for it or not.

HEADING this department is an announcement concerning service to be rendered by THE JOURNAL in connection with the Cooperative Medical Advertising Bureau of Chicago. We are pleased to know that this service is appreciated by some of the readers of THE JOURNAL who have taken advantage of the suggestion. This is a gentle reminder that may help you, whatever your wants may be.

MAY first has been set aside as Child Health Day. It will be observed in Indiana by many communities where those interested in the child health conferences have undertaken constructive work in bettering conditions for children. While we are approving very generally all reasonable efforts to promote the health, comfort and happiness of children, it would be an excellent idea to make May Day one of *pleasure* for the children.

THE present Indiana legislature has been asked to pass a law to protect physicians and hospitals from impositions practiced by people injured in automobile accidents and who are carted off to the hospital by the police ambulance, given attention by some surgeon on the hospital staff, and in the end the patient skips out without paying hospital or doctor even though collecting handsomely from some insurance company. Here's hoping that the deserved protection is obtained.

QUACKERY sometimes is found in high places. A prominent member of the Indiana State Medical Association is said to be treating gallstone cases with the ultraviolet ray and promising to dissolve the stones. The unique feature about the whole business is that about two out of three of the patients who go to the physician are found to

be suffering from gallstones, and a goodly portion of them are cured in due course of time. Paraphrasing a common expression, "Ain't science grand?"

According to the opinion of the Council on Pharmacy and Chemistry of the A. M. A. the barbital derivatives produce restlessness and excitement in some patients, and accordingly barbital, amytal, and similar preparations should be given with some discretion and especially when administered as a pre-anesthetic treatment either to induce quietness of the patient or to offset the toxic effects of a local anesthetic. The surgeon will be wise if he tests the susceptibility of the patient to barbital derivatives prior to operation that is to be done under local anesthesia.

A memorial building is being erected in Paris to be called "Pershing Hall" and in it will be rooms devoted to various organizations that took part in the Great War. It is proposed that one of the rooms be a memorial to physicians who served during the war. The American Medical Association has been asked for ten thousand dollars for this special hall, and it has been thought best to ask for contributions of from one to twenty-five dollars from the membership of the A. M. A. Contributions should be sent to the American Medical Association, 535 North Dearborn Street, Chicago.

Howard W. Ambruster, reputed to have a corner on the ergot market, is "stirring up the animals" again in his efforts to make everyone believe that he and he only knows about the impure and adulterated ergot preparatipons on the market, and in attempting to carry his point he vilifies many reputable manufacturers, government chemists, administrators of food and drug laws, and medical editors who have not seen fit to join in his crusade. Well, such persistence in carrying on a fight ought to get Ambruster somewhere if only in court to answer a damage suit for slander.

It is strange how many people who owe their own doctor at home traipse off to some clinic with a big name and pay cash for services rendered there, and sometimes the services are of the simple variety which could just as well have been obtained at home and at far less expense. Well, as one Denver physician said, "People think that things obtained away from home are a little better. Consequently our Denver people go to Chicago for their surgical attention. Chicago people go to New York, and New York people go to London, the London people go to Paris, and in the end some of them go to hell after finding what they think is the best surgeon to cut out their appendices."

From an exchange we note that a one percent alcoholic solution of brilliant green is effective in sterilization of wounds and also for washing the hands previous to surgical operations. The only objection is that the solution leaves a discoloration of the skin when so used. One-half of one percent of brilliant green is used in aqueous solution for the eye, and one-half of one percent is used in alcoholic solution for minor surgical work. It is stated that the advantages of brilliant green over other antiseptics seem to be that it inhibits the growth of bacteria much more efficiently than any other antiseptic that has been discovered, and, furthermore, it is not irritative to tissue cells. It is very inexpensive and does not deteriorate.

The conclusions arrived at by those who are acting in behalf of the Committee on the Cost of Medical Care are, to say the least, rather suggestive, and bear out our original belief not only that the Committee but those working in behalf of the Committee have state medicine leanings, and no doubt eventually will announce their sentiments to that effect when the final report is made. It is unfortunate that in all of this discussion concerning the cost of medical care we have not for comparison a record of the cost and adequacy of medical care as provided by the state in those instances where state medicine prevails even in a modified form. We believe that it can be shown that state medicine like anything else state controlled is a delusion and a snare, with quality of service and adequacy unsatisfactory.

At this writing the Massachusetts Legislature is wrestling with the subject of state medicine, as proposed by a bill introduced which would furnish medical and surgical services at the expense of the state. As might be expected it is supported by the public health officers and some independent practitioners of medicine. The argument is put forth that there is every reason why the state should furnish medical and surgical services just as it now furnishes education, and it is argued that physicians can work on a salary for the state just as school teachers do, and presumably it will be expected that salaries of medical men will be no more than salaries of school teachers. Some physicians say that state medicine is a bugaboo, but we are beginning to think that it is coming too close to the reality to be comfortable.

In Chicago's relief campaign for the destitute, physicians are playing an important part by donating their services to those who never before have required help but now are in distress and many of whom urgently need medical and surgical attention for which they cannot pay. The Chicago physicians have responded generously by agreeing to accept cases from charitable agencies on certain hours and certain days of each week, and agreeing to care for a certain number of new patients at the patients' own homes when such attention is needed. Services of the charitable agencies of all

sects, creeds and kinds have been co-ordinated to avoid duplication of effort, and the campaign overhead has been eliminated by a volunteer organization. The medical profession, as usual, has come forward with liberal donations in both money and service.

Among agencies that put the stamp of approval upon physicians who are practicing some special field of medicine and surgery, we note that quite recently there has been added to the number a new organization known as the American Board of Obstetrics and Gynecology which will hold examinations and grant certificates indicating efficiency in specialization of obstetrics and gynecology, or both, to those who comply with its requirements. It is hoped and expected that the certificate will have considerable weight in the minds of hospital trustees and other laymen, as well as in many important medical circles whenever a question arises as to the qualifications of an individual who specializes in obstetrics and gynecology. Detailed information and application blanks may be secured upon application to Dr. Paul Titus, Secretary, American Board of Obstetrics and Gynecology, 1015 Highland Building, Pittsburgh, Pa.

Until recently we never knew about the Cleanliness Institute, furthered by the soap manufacturers, the intent and purposes of which evidently are to educate the people to keep clean, and as a mere side issue to use a good deal more soap and thus add to the profits of the soap manufacturers. The director of this institute has been given a leave of absence to enter the employ of the Nationalist Government of China, presumably with the idea of stimulating the use of soap in the Orient, where from personal observation we know that it is sadly needed. They say that cleanliness is next to godliness, and we do know that cleanliness is a very important factor in health preservation. Therefore, soap in China will do an immense amount of good if those who need it can be taught to use it and are able to buy it. In fact, soap may be considered a great civilizer, for a man who is personally clean and lives in clean surroundings is a better citizen and certainly possesses more self-respect.

The American Society of Radiographers has asked the Indiana State Board of Medical Registration and Examination to use its influence in securing an examining board to examine every technician applying for a position to operate an x-ray machine in the state of Indiana. The movement is all right in principle, for in reality there are altogether too many men doing x-ray and laboratory work who are not suitably educated and trained for the work, even though posing as technicians. We believe that every one of these technicians should be medically trained. Our Indiana Board has answered to the effect that it is the Board's opinion that any practice advising the use of x-ray should be limited to regular licensed physicians upon whom all responsibility should rest. The Board therefore takes the stand that the organization of additional examining boards would be an added burden to the taxpayers, and would cover a field already well taken care of by the medical practice act in Indiana.

The New York State Department of Health advocates pasteurization as the most effective measure for preventing the spread of communicable disease through milk. That there is need for such a measure is indicated by the fact that since January 1, 1917, there have been 95 milk-borne outbreaks of sickness in the state, exclusive of New York City, 93 of which have been traced to unpasteurized milk. The department, however, recognizes that under present conditions there are many sparsely settled sections in which a requirement that all milk be pasteurized would be impractical of enforcement. The ideal milk is certified milk, but again that is next to impossible to obtain except for a very restricted number of people, for control of certified milk is a difficult and expensive problem, and in turn the product is so expensive to consumers that only the well-to-do usually can afford certified milk. On the other hand, pasteurized milk should be insisted upon in all but the most sparsely settled sections.

Nothing is more asinine than the establishment of a children's bureau *in the Department of Labor* at Washington. Apparently its chief function is to give jobs to favorites of politicians. The advice given by this bureau oftentimes is pernicious, and if lay people are going to take their health problems to Washington it is a foregone conclusion that they are not going to accomplish much in preventing or curing disease. Some of the lay papers carry a column devoted to the bureau's propaganda and recently this caption was noted: "Has Baby the Colic? Take It to Washington—Not the Baby, Just the Problem." To which is added "Thousands Do."

Commenting on this *Southern Medicine and Surgery* says: "What advice could be more pernicious? A baby with colic may be hungry—he may be full of wind—his alimentary canal may be undeveloped, or he may have intususseption, or he may have intracranial hemorrhage or strangulated hernia."

Fine advice is given when it is recommended that the problem be taken to Washington! However, perhaps that is a sample of what state medicine will do when it gets going!

Fee splitting in its final analysis is the buying and selling of patients. It is pernicious in effect, condemned by all right thinking physicians, and in some states is an offense punishable by law. Less dangerous to the welfare of the patient but still pernicious in its effect is the petty graft prac-

ticed by some physicians in exacting or accepting rebates upon sale of surgical instruments, appliances, optical goods and drugs to patients by the dealers. The Bureau of Publicity of our Association has had called to its attention several specific instances where physicians have refused to permit prescriptions for anything needed by the patient to go to any dealer unless that dealer accedes to the demand for a rebate to be credited to the physician. In one or two instances the dealers have refused to be a party to such a sordid bargain and are asking the Association to take such measures as seem necessary to check such a petty graft that is so undignified and unprofessional to say nothing of being dishonest. It is our candid opinion that rebating on prescriptions for anything sold by the instrument dealer, manufacturing optician or druggist is a relatively rare incident, but the Bureau of Publicity of our Association has promised to give the subject serious attention if further reports are received.

The following is a copy of a form letter sent to Massachusetts physicians recently:

"The old expired Sheppard-Towner maternity is revived in S255. It passed Senate amended, is reported from House committee and is due for prompt passage.

"It bribes states into State Medicine. It brings them under Federal submission. It puts a woman in as administrator.

"By expiration of the old Sheppard-Towner Act, the women politicians, lobbyists and social job hunters lost its million dollars a year in salaries and travel.

"One million is a big prize worth their increased efforts to regain; but State Medicine destroys, and America cannot afford to follow in the paths that led to the undoing of medicine in Russia.

"Write to Congressmen and to your friends for their immediate influence with Congressmen of other states.

"Act today. Tomorrow may be too late."

Massachusetts Civic Alliance.
Eben W. Burnstead, Secretary.

Deferred payments have been the ruination of the country insofar as the present depression is concerned, for while production was going full blast everyone was urged to buy on credit, and then when credit was exhausted and nothing more could be bought production stopped. Then the frugal and thrifty, who had a few dollars in the savings banks, were urged to spend in order to revive business. To our notion someone ought to help Calvin Coolidge out by urging that people save instead of spend. However, with everyone being encouraged to advertise more we again are seeing the familiar signs, "Ride while you pay"—"Listen to your radio while you are paying for it"—"Dress on your credit," and if the wife happens to do her own work she probably is being urged to have the washing done with the electric washer, and the sweeping done with the electric sweeper while paying for those household luxuries. The fact of the matter is practically anyone can get credit for commodities, including food, clothing, automobiles, houses, radios, electric washing machines, and a dozen other things, but always by giving a note, suitably secured, or a guarantee of payment on the installment plan. The finance companies handle the loans. But where will it all end?

Medical services cost more now than they did in the good old days, according to *Hygeia* for January, but it is explained that this is not due to a great conspiracy among medical men to raise prices and rob the people but because present-day delivery of medical service carries with it a definite and considerable overhead expense, and that is particularly true of the physician who keeps up to date in professional knowledge and equipment. This heavy overhead expense did not exist in the gay nineties, but it is an important factor at the present time and, as pointed out by *Hygeia,* the physician who keeps up to date in professional knowledge and equipment is compelled to spend from forty to fifty cents of every dollar that he receives to pay the actual expense of delivering competent service to his patients. It might have been added that in a comparative way the fees of physicians have not kept pace with the cost of everything else. In the nineties when a doctor was receiving one dollar for an office call, including prescription, he paid a laboring man one dollar per day for working in his garden for perhaps ten hours' work, whereas today that same worker gets five dollars per day and seldom if ever puts in more than seven or eight hours of real work. Furthermore, the public should not lose sight of the fact that medical and surgical service is infinitely better today than it was thirty years ago. Certainly there is no reason for saying that physicians are overpaid.

The New York State Department of Health in one of its broadcasts talks about the common cold and its dangers as apparently predisposing the individual to pneumonia, sinus and middle ear infection. The points made in the broadcasts are as follows: The common cold is infectious; as yet we are without any proven means of prevention or cure; a certain proportion of common colds may be of the same nature as epidemic influenza; available evidence points to the fact that abnormalities of the nose and throat, such as disease of the tonsils, deflected septum, and others do not predispose to colds; apparently, also, hardening by exercise or cold bathing does not protect against colds; carefully controlled observations show no benefit from injections of so-called "cold" vaccine; moderate doses of ultraviolet light did not prove to be of value in two controlled experiences, one in London and the other in Baltimore. By way of advice the department says. "When you feel your-

self coming down with a cold or with influenza call a physician if your symptoms are severe, but at all events go to bed at once and stay there until your symptoms have subsided and your temperature has been normal for a day. By so doing you probably will avoid complications which are likely to follow, such as middle ear infection and pneumonia, you will recover and get back to work quicker, and you will save many others from catching your infection." This certainly is sound advice, even though it does put a crimp in the teachings of those manufacturers of biological products and those physicians who are bragging about the good therapeutic effects of "cold shots" or the attempt to immunize against colds by the introduction of "common cold" vaccine.

ACTION of the Indiana House of Representatives in defeating an amendment to the impossible Wright Bone Dry Law, whereby licensed physicians would have been permitted to prescribe medicinal whisky, was best described by one of its own members, Representative John D. T. Bold, of Evansville, when he said:

"It looks as if the House is going to surrender, as it has in the past five sessions, to the Anti-Saloon League, the W. C. T. U., and the forces of intolerance and bigotry."

Interdiction of the prescription of medicinal whisky goes beyond intolerance and bigotry. It is a clearly unwarranted interference with the right of licensed and qualified physicians to make free exercise of that scientific judgment upon possession of which depended the State's commissions to practice medicine. It is a nasty and gratuitous insult to thousands of medical men. It is a handicap to the treatment of many disorders in which a large number of physicians believe that whisky is an effective medicament. It is an encouragement to bootlegging, with the penalty of peril placed upon innocent sufferers who may be made the victims of spirits of doubtful quality.

In obedience to the lash of the Anti-Saloon League zealots, the Indiana House of Representatives takes the position that a physician may prescribe raw 96 percent grain alcohol, but may not prescribe aged 10 percent wine, or 50 percent whisky. It is an absurd outrage, which has nothing to defend it save only a stubborn, bulldoggish, "bitter end" determination to maintain on the Hoosier statute books a flagrant fanaticism which has made the State of Indiana a veritable laughing-stock in the eyes of her neighbors.

There is, in this action, which follows the Senate's narrow defeat of a state-wide referendum on the liquor question, very little that is not most discouraging. But that very little does exist, for this vote in the House of Representatives on Monday was the closest ever taken on the Wright Law, since that iniquitous measure was nailed into the statutes in 1925. There is, for the first time in many years, a ray of promise that, if not in the present session, then in the next, the General Assembly will alter its position to take ground more nearly coincident with that taken by the great mass of intelligent Indiana opinion.—*News-Sentinel* (Fort Wayne), Feb. 18, 1931.

OF course the chiropractors and all the other pseudo-medical cults are opposed to the all-time health officers bill, as they also are opposed to any other legislation of a medical nature that does not feather their nests. A few choice comments taken from the legislative bulletin of the Indiana Chiropractors' Association concerning the all-time health officers' bill are as follows: "You will note same (the health officer bill) is drastically *indifferent* (italics ours) to the chiropractic profession." Why shouldn't it be? A chiropractor knows about as much concerning public health as a wooden Indian. The bulletin gets off a choice morsel when it says, "This vicious measure must be defeated at all hazards. We have purposely omitted from the brief inclosed all references to health officers having charge of contagious and infectious diseases since that is a delicate subject for the chiropractor to discuss with the uninformed layman." Evidently the chiropractors realize that even the average layman knows that the chiropractor's knowledge of contagious and communicable diseases amounts to nothing. Again the bulletin says, "The medical profession is making a supreme attempt to pass the measure at this session, and for this reason we forwarded to you a few days ago the petitions regarding taxation, making an indirect attack without crossing of swords before the battle got under full sway. However, in the meantime we are digging our trenches and building our fences for defeat of the measure. In executing the petition we feel that it will not be practical at this time to mention the same in connection with Senate bill No. 90 although you may be given further instructions as to the *physiological* (italics ours) moment to strike another blow from a different angle. For weeks the medical profession under the guise of child welfare have been spreading their malicious propaganda by speeches, radio broadcasts, and through the daily press. While they have not mentioned the health officer bill the ultimate desire was obvious. Dr. Fishbein, president of the A. M. A., (?) has been in Indiana for some time we believe, working toward the passage of this measure in the legislature (a lie, but that means nothing to the chiropractors). The officers and committees have decided to be on the defensive only for the present, holding further chiropractic legislation in reserve awaiting future developments." And that's that! Such a bulletin ought to make converts among the regular medical profession for the all-time health officer bill, for anything to which the chiropractors object must be a pretty good thing!

FOR a long time THE JOURNAL has urged Indiana physicians to refuse to render gratuitous services to insurance companies. The Michigan

State Medical Society has set an example that our own Association should follow. We herewith publish the notice sent out to the Michigan physicians:

MICHIGAN STATE MEDICAL SOCIETY

OFFICE OF THE SECRETARY

Grand Rapids, Michigan, Feb. 9, 1931.

To County Secretaries,
Michigan State Medical Society:
Gentlemen:

By direction of the Council I am submitting the following statement for your information with the request that you transmit it to your membership. It is the earnest desire of the Council and the Committee on Civic and Industrial Relations that this information reach *every member*. Further, that a firm, unswerving position be taken by each member. And lastly that *every member decline* to fill out any Insurance Blank until he has received his fee for doing so.

Insurance companies have imposed upon physicians. They have and are now profiting by reason of the expert opinions and advice obtained from physicians without paying for it. Such imposition should no longer be tolerated. It is estimated that these insurance corporations are receiving approximately a million dollars worth of opinions and expert testimony from physicians without remunerating the physicians.

The average doctor fills out about 20 to 50 such blanks a year. Does he relish making a contribution of $40 to $100 per year to corporations?

Insurance representatives, when a doctor declines to fill out a blank, advance several "sob arguments": "The patient or the relative is being deprived of his money," etc. Do not be persuaded by his argument. A *united front* and a *firm stand* by *every doctor* will cause them to accede to our demands.

The Council, the House of Delegates and the Committee direct that every member comply with the following resolution:

The committee wish to report that in conformity with Resolution No. 1 passed at the annual meeting last year, in which it was "Resolved, That physicians charge a fee of not less than $2.00 to old line life insurance companies for rendering special reports of the health and physical condition of prospective applicants for insurance, etc. * * *" that these old line insurance companies apparently are cooperating. To date only one complaint has been received, in which there was refusal to pay for filling out a claim.

Resolution No. 2 passed at the annual meeting last year, "Resolved, That physicians charge a fee of not less etc. * * *" has received considerable comment from physicians throughout the state. Several cases are on record in the chairmans' office in which the insurance companies have refused to honor statements of physicians for services rendered within the meaning of the resolution. Correspondence from insurance companies indicates that they do not intend to consider the physicians in this matter. The resolution apparently is weak and does not contain an alternative for the physician to resort to in case the insurance company refuses payment.

Your committee suggests that physicians refuse to fill out blanks for health and accident insurance companies unless payment is guaranteed to the physician by the insurance company, either direct or through the claimant, before the report is filled out.

Your committee further recommends that an ultimatum be delivered to each insurance company that the members of the Michigan State Medical Society refuse to fill out insurance blanks unless payment is guaranteed in this way. Ultimately it will mean that insurance companies will provide for payment for such services in the original contract or policy, which is issued to the claimant, and so advise him at the time it is purchased. The committee therefore makes this recommendation and asks that, if adopted, they be authorized to notify all insurance companies in accordance with the following resolution:

"Whereas, The Michigan State Medical Society passed a resolution at its annual meeting in Jackson, Michigan, September 17, 1929, regarding the filling out of claim proofs of Health and Accident Insurance Companies, and

"Whereas, The responsibility for the payment of a fee to the physician for such services was placed upon the insurance company, and

"Whereas, It was resolved that such fee be not less than $2.00 for each preliminary and final claim proof, the fee to be increased according to the type of service rendered, and

"Whereas, Since the adoption of this resolution the majority of Health and Accident Insurance Companies have disputed their responsibility to pay the physician, therefore

"Be It Resolved, That physicians refuse to fill out blanks for any insurance company unless payment is guaranteed to the physician by the insurance company, either direct or through the claimant, before the report is filled out, and

"Further, That the home office of each insurance company be notified that the members of the Michigan State Medical Society have adopted this resolution."

Members, when filling out a blank after receiving a fee, should *not* answer any of the following questions:

For what diseases have you attended the patient?

Has he ever had tuberculosis?

Have any relatives died of tuberculosis or heart disease?

What is his present physical condition?

If you answer these questions you impart "confidential information" and become *liable* for damages through suit by the patient or his estate. Within the year several doctors have been sued and judgments rendered against them for having imparted this confidential information to insurance companies. A release will not protect you in court. You are warned to be careful in the answers you give.

Please impress upon all your members the imperative necessity of complying with the requests and recommendations contained in this communication.

By direction of the Council.

F. C. Warnshuis,
Secretary.

MEDICO-LEGAL DEPARTMENT

Albert Stump

ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

INDIANAPOLIS

Question: What are the rights of physicians in the prescription of liquor under the joint regulations and limitations of the Volstead Act and the Wright Act?

Answer: The Volstead Act gives to a physician the right to prescribe liquor for medicinal purposes under Sections 16, 17, 18, 19 and 20, Title 27, 1926 U. S. Code. The prescription may be filled by a pharmacist who possesses a permit under Section 16. The permit is obtained by the pharmacist upon his application to the Commissioner of Internal Revenue and the filing of a bond as required by the commissioner to insure compliance with the terms of the permit and provisions of the law.

The physician holding a permit to prescribe liquor may issue prescriptions under the following

conditions and limitations as stated in the sections following:

17. Physicians' prescriptions.—No one but a physician holding a permit to prescribe liquor shall issue any prescription for liquor. And no physician shall prescribe liquor unless after careful physical examination of the person for whose use such prescription is sought, or if such examination is found impracticable, then upon the best information obtainable, he in good faith believes that the use of such liquor as a medicine by such person is necessary and will afford relief to him from some known ailment. Not more than a pint of spirituous liquor to be taken internally shall be prescribed for use by the same person within any period of ten days and no prescription shall be filled more than once. Any pharmacist filling a prescription shall at the time indorse upon it over his own signature the word "canceled," together with the data when the liquor was delivered, and then make the same a part of the record that he is required to keep as herein provided.

Every physician who issues a prescription for liquor shall keep a record, alphabetically arranged in a book prescribed by the commissioner, which shall show the date of issue, amount prescribed, to whom issued, the purpose or ailment for which it is to be used and directions for use, stating the amount and frequency of the dose. (October 28, 1919, c. 85, Title II, Par. 7, 41, Stat. 311.)

18. Kinds of liquor which may be prescribed; percentage of alcohol in; quantity permitted to be prescribed.—Only spirituous and vinous liquor may be prescribed for medicinal purposes, and all permits to prescribe and prescriptions for any other liquor shall be void. No physician shall prescribe, nor shall any person sell or furnish on any prescription, any vinous liquor that contains more than 24 percentum of alcohol by volume, nor shall anyone prescribe or sell or furnish on any prescription more than one-fourth of one gallon or vinous liquor, or any such vinous or spirituous liquor that contains separately or in the aggregate more than one-half pint of alcohol for use by any person within any period of ten days. But this provision shall not be construed to limit the sale of any article the manufacture of which is authorized under section 13 of this chapter. (November 23, 1921, c. 134, Par. 2, 42 Stat. 222.)

19. Prescription blanks.—The commissioner shall cause to be printed blanks for the prescription herein required, and he shall furnish the same, free of cost, to physicians holding permits to prescribe. The prescription blanks shall be printed in book form and shall be numbered consecutively from 1 to 100, and each book shall be given a number, and the stubs in each book shall carry the same numbers as and be copies of the prescriptions. The books containing such stubs shall be returned to the commissioner when the prescription blanks have been used, or sooner, if directed by the commissioners. All unused, mutilated, or defaced blanks shall be returned with the book. No physician shall prescribe and no pharmacist shall fill any prescription for liquor except on blanks so provided, except in cases of emergency, in which event a record and report shall be made and kept as in other cases. (October 28, 1919, c. 85, Title II, par. 8, 41 Stat. 311.)

20. Number of blanks issued to physician within given period.—No physician shall be furnished with more than one hundred prescription blanks for use in any period of ninety days, nor shall any physician issue more than that number of prescriptions within any such period unless on application therefor he shall make it clearly apparent to the commissioner that for some extraordinary reason a larger amount is necessary, whereupon the necessary additional blanks may be furnished him. (November 23, 1921, c. 134, Par. 2, 42 Stat. 222.)

Section 21 provides that if a permittee violates any of the regulations contained in the Federal Statute or in the laws of any state relating to intoxicating liquor, the permit shall be revoked upon a citation and hearing.

It will be observed that the term "spirituous and vinous liquor" is used in stating what may be prescribed.

The Act, in Section 4, contains the following definition as to the meaning of liquor:

4. Definitions.—When used in this title (1) The word "liquor" or the phrase "intoxicating liquor" shall be construed to include alcohol, brandy, whisky, rum, gin, beer, ale, porter, and wine, and in addition thereto any spirituous, vinous, malt, or fermented liquor, liquids, and compounds, whether medicated, proprietary, patented, or not, and by whatever name called, containing one-half of 1 per centum or more of alcohol by volume which are fit for use for beverages purposes.

It will be seen from the provisions of the Volstead Act that any form of alcoholic liquor may be prescribed, so long as the alcoholic content of the total amount prescribed does not constitute a violation of the act.

The Wright Bone Dry Law contains the following provision in regard to the right of a physician to prescribe intoxicating liquor:

A registered pharmacist holding a permit to sell intoxicating liquors may sell pure grain alcohol for medicinal purposes, only upon the written prescription of a reputable physician in active practice and only upon the prescription provided for in section seventeen of this act. Only one sale shall be made upon such prescription and for not more than one (1) quart. Burns 1926, Section 2728.

Section seventeen referred to in this quoted section reads as follows:

17.—It shall be unlawful for any licensed physician to issue a prescription for intoxicating liquor except in writing; nor in any case, unless he has good reason to believe that the person for whom it is issued will use the same for medical or surgical purposes or as an antiseptic. Every prescription for intoxicating liquor shall contain the name and address of the physician, the name and quantity of liquor prescribed, the name of the person for whom prescribed, the date on which the prescription is written and direction for the use of liquor so prescribed. Upon the conviction of any licensed physician of a violation of the provision of this section, it shall be unlawful for such physician thereafter to write any prescription for the furnishing, delivery or sale of intoxicating liquor, and it shall be unlawful for any pharmacist to knowingly fill any such prescription written or signed by any physician who has been convicted of a violation of the provisions of this section. Burns 1926, Section 2733.

The pharmacist may obtain a permit under the Indiana statute upon making his application to the Clerk of the Circuit Court and filing a bond in the penal sum of $1,000, conditioned that he will not sell intoxicating liquor except as provided in the Act. Section 2726, Burns 1926. There is a proviso in this section that a pharmacist who has a permit from the United States government may obtain a state permit by filing a copy of his Federal permit, without the filing of a bond or the payment of other fees.

In view of the definition in the Volstead Act and the nature of the permit granted under that Act, it is our opinion that the Volstead Act does not interfere with the exercise of the right given in the Indiana law to a physician to prescribe grain alcohol, in accordance with the terms of the Indiana law—with the exception that the limita-

tion in the Volstead Act as to the amount prescribed must be observed. (See Section 18 of the Federal Statute, here quoted.)

DEATH NOTES

John Frank Laval, M.D., of Evansville, died February 6th, aged thirty-seven years. Doctor Laval had been ill with pneumonia. He was a graduate of Rush Medical College, Chicago, in 1919.

Lyman A. Crim, M.D., of Indianapolis, died February 5th, aged seventy-seven years. Doctor Crim was not in active practice. He was a graduate of the Indiana Medical College, Indianapolis, in 1878.

William R. Bentley, M.D., of Morristown, died February 18th, following a short illness of pneumonia. Doctor Bentley was seventy-nine years of age. He graduated from the Chicago Homeopathic College in 1886.

George L. Guthrie, M.D., of Indianapolis, died suddenly following a heart attack, at Columbus, Indiana, February 12th. Doctor Guthrie was fifty-four years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1900.

Samuel M. Ford, M.D., of Madison, died in Orlando, Florida, February 14th. Doctor Ford was eighty-one years of age, and had retired from the practice of medicine fifteen years ago. He graduated from the University of Louisville School of Medicine, in 1872.

Joseph E. Hall, M.D., of Alexandria, died February 16th, aged seventy-two years. Doctor Hall graduated from the Medical College of Indiana, Indianapolis, in 1881. He was a member of the Madison County Medical Society, the Indiana State Medical Association and the American Medical Association.

W. M. Garretson, M.D., of Perkinsville (R. R. Anderson), died in Indianapolis, January 25th, aged seventy years. Doctor Garretson graduated from the Medical College of Indiana, Indianapolis, in 1882. He was a member of the Madison County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

Noah R. Wenger, M.D., of Fort Wayne, died February 11th, aged seventy-eight years. Doctor Wenger died following injuries received when he was crushed between an automatic elevator and floor in a Masonic building in Fort Wayne. Doctor Wenger had retired from the active practice of medicine. He was a graduate of the Cincinnati College of Medicine and Surgery in 1880.

Charles H. Schenk, M.D., of Lagrange, died February 5th, aged sixty years. Doctor Schenk served over seas during the World War in the capacity of first lieutenant in the U. S. Army. He was a member of the Indiana State Medical Association and the American Medical Association. He graduated from the Curtis Physio-Medical Institute, at Marion, in 1894.

Benjamin F. Wray, M.D., of Camden, died February 4th, aged forty-seven years. Doctor Wray was a former state representative from Carroll and Cass counties. He graduated from the Indiana University School of Medicine, Indianapolis, in 1911, and was a member of the Carroll County Medical Society, the Indiana State Medical Association and the American Medical Association.

J. W. McClure, M.D., of Milan, died January 26th, aged sixty-five years. Doctor McClure had been ill for several weeks. He was a member of the Ripley County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, at Indianapolis, in 1904, and from the Hospital College of Medicine, Louisville, Kentucky, in 1898.

Stephen Egart, M.D., of Indianapolis, died February 6th, aged fifty-eight years. Doctor Egart graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1908. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association, the Association of Anesthetists of the United States and Canada and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

The Wayne-Union County Medical Society held a meeting at Richmond, February 19th. Dr. E. L. Lingeman, of Indianapolis, presented a paper on "Common Colds."

The Whitley County Medical Society held its regular meeting February 10th, at Columbia City. Dr. Ernest R. Carlo, of Fort Wayne, presented a paper on "Infant Feeding."

At the February 17th meeting of the Madison County Medical Society, Dr. Weir Miley presented a paper dealing with the indigency being fostered through free medical service.

The Clinton County Medical Society held a dinner meeting at the Coulter Hotel, Frankfort,

February 5th. Dr. J. O. Ritchey, of Indianapolis, presented a paper on "Hypothyroidism."

DR. A. T. FLETCHER, of Danville, Illinois, presented a paper on "Meningitis in Children" before the February 5th meeting of the Fountain-Warren County Medical Society, at Hillsboro, Indiana.

THE American College of Physicians will hold its fifteenth annual clinical session at Baltimore, Maryland, from March 23 to 27, inclusive, 1931: Headquarters will be at the Lord Baltimore Hotel.

THE Floyd County Medical Society held a meeting at the Public Library in New Albany, February 13th. Dr. Amzi Weaver, of New Albany, talked on "Pulmonary Edema" and reported some cases.

AT the February 9th meeting of the Gibson County Medical Society, held at Princeton, Dr. E. N. Kime, of Indianapolis, presented a paper on "Physical Therapy and Its Relation to General Practice."

THE Northeastern Indiana Academy of Medicine met at the Gawthrop Hotel, Kendallville, February 26th. Dr. M. Herbert Barker, of the Northwestern University Medical School, Chicago, presented a paper on "Nephritis."

THE Hendricks County Medical Society met at Crawley Hall, Danville, Indiana, January 23rd. Following a chicken dinner, Dr. A. M. Mendenhall, of Indianapolis, presented a paper on "Some Newer Things in Obstetrics."

THE St. Joseph County Medical Society met at Knights of Columbus Hall, South Bend, February 11th. This was a dinner meeting. "Some of the Newer Aspects of the Nephritis Problem" was the subject presented by Dr. F. W. Hartman, of Detroit.

THE Terre Haute Academy of Medicine held its meeting at the Elks' Club, Terre Haute, February 6th. Dr. J. D. Barney, of Harvard, presented a paper on "Infections of the Kidney and Their Management." This paper will be published in THE JOURNAL at a later date.

THE United States Civil Service Commission has announced open competitive examination for occupational therapy aide (arts and crafts), applications for which positions must be on file with the Civil Service Commission at Washington, D. C., not later than March 25, 1931.

A SYMPOSIUM on medical cases in industrial medicine was presented by Dr. Foss Schenck, and discussed by Dr. John Bradfield, Dr. W. A. Holloway, Dr. C. H. McCully, and Dr. John Davis, at the February 19th meeting of the Cass County Medical Society, held in Logansport.

THE Tippecanoe County Medical Society held its regular meeting February 12th, at the Purdue Home Economics Building, Lafayette. Albert Stump, attorney for the Indiana State Medical Association, presented a paper on "Some Special Legal Rights and Duties of Professional Men."

DR. LEROY W. HUBBARD, of Warm Springs, Georgia, addressed the members of the Indianapolis Medical Society in the Medical School Auditorium, February 24th, his subject being "The Development of Warm Springs Foundation for the Treatment of Paralysis Due to Poliomyelitis."

AT the February 17th meeting of the Delaware-Blackford County Medical Society, in Muncie, Albert Stump, of Indianapolis, attorney for the Indiana State Medical Association, talked on "Expert Evidence in the Courts." This was a joint meeting of the Medical Society and the Muncie Bar Association.

DR. A. S. GIORDANO, of South Bend, presented a paper on "Undulant Fever" before the meeting of the Laporte County Medical Society at Michigan City, February 19th. Dr. R. A. Gilmore, of Michigan City, presented a case, "Unusual Sequellæ Following Scarlet Fever." Twenty members and seven guests were present.

DR. R. N. HARGER, of the Indiana University School of Medicine, presented a paper on the medical and legal aspects of alcohol at the Howard County Hospital, Kokomo, February 6th. The speaker showed that, while deaths from alcoholism were on the increase, yet the present rate was not as high as in the days of the saloon.

THE LaPorte County Medical Society held its regular meeting at LaPorte, January 22nd. Dr. F. V. Martin, of Michigan City, presented some case reports and discussed three cases of subacute bacterial endocarditis. A new constitution and by-laws for the LaPorte County Medical Society were discussed and adopted.

"INTRAVENOUS PYELOGRAPHY WITH URO-SELECTAN" was the subject presented by Dr. C. L. Bock, of Muncie, before the Delaware-Blackford County Medical Society at its meeting held in Muncie, January 20th. Doctor Bock reviewed the history of the discovery of intravenous methods and made clear the advantages and limitations of its use.

"THE Prostate as a Focus of Infection" was the title of a paper presented before the Fort Wayne Medical Society, February 17th, by Dr. William C. Wright. Dr. Arthur H. Curtis, of Northwestern Medical School, talked on "The Surgical Correction of Pelvic Lesions Incident to

Childbirth" at the meeting of the society March 3rd.

The Northern Tri-State Medical Association will hold its fifty-eighth annual meeting at Ann Arbor, Michigan, April 14, 1931. Doctors Cyrus, Sturgis, John Alexander and Frank Wilson will conduct morning clinics. Afternoon and evening programs will be given over to various speakers from different parts of the country. Prof. Carl D. Camp, of Ann Arbor, will make arrangements for those who wish to stay over night.

The regular meeting of the Elkhart County Medical Society was held at the Hotel Elkhart, February 5th. Dr. Martin Dewey, of New York City, president-elect of the American Dental Association, presented a paper on "The Evolution and Development of the Head and Face as Related to Certain Deformities." The paper was illustrated with lantern slides. This was a joint meeting of the Elkhart County Medical Society and the Thirteenth District Dental Society.

At the regular meeting of the Wells County Medical Society, January 20th, the following officers were elected for 1931: President, Dr. C. H. Mead, Bluffton; vice-president, Dr. O. G. Hamilton, Bluffton; secretary-treasurer, Dr. Max M. Gitlin, Bluffton; delegate to state convention, Dr. D. C. Wybourn, Ossian. Dr. S. A. Goodin, who has practiced more than fifty years in Wells county, and who now is retired from active practice, was made an honorary member of the Wells County Medical Society.

The U. S. Civil Service Commission announces open competitive examinations for chief nurse (Indian Service), head nurse (Indian Service), graduate nurse (various services), and graduate nurse, visiting duty (various services). Applications for the positions will be rated as received by the U. S. Civil Service Commission at Washington, D. C., from where complete information may be obtained, until June 30, 1931. Examinations are to fill vacancies in the Departmental Service, Washington, D. C., and in the Veterans' Bureau, Public Health Service, and Indian Service.

The United States Civil Service Commission announces open competitive examinations for senior medical technician (bacteriology or roentgenology) and medical technician (bacteriology or roentgenology), applications for which positions must be on file with the United States Civil Service Commission at Washington, D. C., not later than April 1, 1931. Examinations are to fill vacancies in the Veterans' Administration. There is a vacancy at Tuskegee, Alabama, in the position of laboratorian (senior medical technician) in roentgenology, for which colored persons are urged to apply.

The Indianapolis Medical Society held its regular weekly meetings February 3rd, 10th, 17th and 24th. At the February 3rd meeting, cases were reported by Drs. Simon Reisler, O. B. Norman, C. D. Humes, Carl B. Sputh, H. F. Nolting, W. D. Little and R. C. Beeler. The resident staff of the University Hospitals furnished a clinical program for the February 10th meeting, which was held in the Medical School Amphitheater. At the meeting February 17th, Dr. C. O. McCormick presented a paper on "Popularizing Rectal Ether Analgesia in Obstetrics" and Dr. E. E. Padgett talked on "Pseudo-Muninous Peritonitis." A great deal of interest has developed in the Indianapolis Medical Society Bowling League.

The American Association for the Study of Goiter will meet in Kansas City, Missouri, April 7th, 8th and 9th. On Tuesday, April 7th, there will be a diagnostic clinic by Dr. H. S. Plummer, of Rochester, Minnesota; a clinical pathological conference conducted by Dr. Gordon Fahrni, of Winnipeg, Canada; and papers by Dr. H. S. Plummer, of Rochester; Dr. J. F. McClendon, of the University of Minnesota; Dr. C. Toland, of Los Angeles; Dr. Morris Ginsberg, Kansas City; Dr. Martin Nordland, of Minneapolis, and Dr. LeRoy D. Long, of Oklahoma City, Oklahoma. Wednesday, April 8th, will include surgical clinics presented by staffs of Kansas City hospitals, and round table discussion, conducted by Dr. Arnold Jackson, of Madison, Wisconsin; and papers by Dr. Kerwin Kinard, of Kansas City; Dr. R. D. McClure and Dr. A. B. McGraw, of Detroit; Dr. Emil Goetsch, of Brooklyn; Dr. Fred Coller and Dr. R. D. Arn, of Ann Arbor, Michigan; Dr. William Dinsmore, of Cleveland; Dr. Harry Richter, of Chicago, and Dr. K. McGregor, of Hamilton, Ontario. On Thursday, April 9th, there will be a symposium on the goiter heart by Drs. L. S. Milne, of Kansas City, and Harold Marsh, Madison, Wisconsin; and a symposium on preparation and after care of operative cases, by Drs. James Hayes, Minneapolis; A. E. Hertzler and V. E. Chesky, Halstead, Kansas; and Dr. E. P. Sloan, Bloomington, Illinois. Papers will be presented by Dr. Charles Frazier, Philadelphia; Dr. Andre Crotti, Columbus; Dr. Allen Graham, Cleveland; Dr. Howard Clute, Boston; Dr. Fred Wetherell, Syracuse, New York; Dr. Walter Sistrunk, Dallas, Texas, and Dr. Brien T. King, Seattle, Washington. Members desiring further information concerning the meeting may address the president, Dr. K. W. Kinard, 1102 Professional Bldg., Kansas City, or Dr. J. R. Yung, Terre Haute, Indiana, who is corresponding secretary. Headquarters will be at the Hotel President, Kansas City, Missouri.

The Central State Hospital has been selected to represent the United States at the International Medical Congress to be held at Breslau, Germany, during the second week in April. During this

meeting the first International Symposium on the Malaria Treatment of Paresis will be held and Dr. Walter L. Bruetsch, pathologist of the Central State Hospital, will be one of the speakers at this meeting. Following this meeting Doctor Bruetsch will go to Vienna, where he will be the guest of Doctor Wagner-Juregg, the originator of this form of treatment and who in 1927 was the recipient of the Nobel prize in medicine for this discovery. The malaria treatment of paresis has now received universal recognition and approval and the Central State Hospital is the first institution in America to do extensive research along this line of medication. The original line of investigation at the Central State Hospital as to how this form of treatment brings about recovery in patients with paresis is now being generally accepted by all scientific investigators. These observations have been made a permanent record by photograph reproductions and moving picture films. Many noted research workers throughout the world have visited the Central State Hospital to obtain information relative to this particular line of endeavor. The most recent one was Dr. Bruce Mayne, of Calcutta, India, one of the foremost authorities on tropical medicine and an author of several text-books, who was the guest of Dr. Max A. Bahr, superintendent, for several days during the past week. Doctor Mayne recently returned from India, where he was a member for four years of the Malaria Survey Commission of that country for the British government. In this survey Doctor Mayne reported that there were twenty million cases of malaria in India and that one million deaths occurred each year from this disease. Future plans for the use of malaria in the treatment of paresis were discussed by Doctor Bahr with Doctor Mayne. At the present time Doctor Mayne is engaged by the U. S. Public Health Service, of Washington, D. C., where he is to do special research work along the line of malaria treatment of paresis which the United States government expects to inaugurate and also with the idea of establishing stations throughout the country where malaria blood can be obtained for treatment purposes.

IN addition to the articles already enumerated the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Ampules Gold Sodium Thiosulphate-Abbott, 0.01 Gm.

Arlington Chemical Co.:

Grass Mixture No. 1 Pollen Extract-Arlco (Timothy, June Grass, Orchard Grass, Red Top, in equal parts); Grass Mixture No. 2 Pollen Extract-Arlco (Timothy 40 percent, Orchard Grass, Red Top, and Sweet Vernal Grass, each 15 percent); Grass Mixture No. 3 Pollen Extract-Arlco (Bermuda Grass and Johnson Grass in equal parts); Ragweed Dwarf and Giant Mixture Pollen Extract-Arlco (equal parts of each; Birch Mixture Pollen Extract-Arlco (White Birch, Black Birch, Yellow Birch in equal parts); Maple Mixture Pollen Extract-Arlco (Red Maple, Ash-leaved Maple, Norway Maple, Sugar Maple in equal parts); Oak Mixture Pollen Extract-Arlco (White Oak, Red Oak, Black Oak, Swamp Oak in equal parts).

Fairchild Bros. & Foster:

Liver Extract-Fairchild.

Eli Lilly & Co.:

Tablets Amytal, ¾ grain.

H. A. Metz Laboratories:

Sulpharsphenamine-Metz, 0.75 Gm. Ampules.
Sulpharsphenamine-Metz, 0.9 Gm. Ampules.
Sulpharsphenamine-Metz, 3.0 Gm. Ampules.

G. D. Searle & Co.:

Procaine Borate-Searle:

Ampules Procaine Borate and Epinephrin 1 cc.

INDIANA UNIVERSITY NEWS NOTES

JOE MCCOOL, Evansville, and Joe Haslinger, Indianapolis, both students in the Indiana University School of Medicine at Bloomington, have been pledged to the Phi Rho Sigma professional medical fraternity.

THE Indianapolis Medical Society held its February 10th meeting at the Indiana University Medical School (Indianapolis) amphitheater. The program was provided by the resident staffs of the University hospitals.

PHI RHO SIGMA, professional medical fraternity at Indiana University (Bloomington), announces the election of Robert E. Blackford, Middletown, Ohio, president; Robert H. Wisehart, Salem, secretary and treasurer; and Dick Steele, Huntington, chairman of activities.

FRIDAY, February 13th, all students of Indiana University who expect to apply for matriculation in any medical school of the United States or Canada this fall were given an aptitude test. The test covered a period of two hours. It was in charge of the staffs of the Departments of Anatomy and Physiology.

INCREASED enrollment over the second semester of last year has been recorded at Indiana University. Enrollment at Bloomington now is 3,264 and that at Indianapolis about 700, a total of nearly 4,000. The enrollment figure at Bloomington represents an increase of sixty-four over the enrollment figures for the same time the second semester of last year.

DR. W. D. GATCH, professor of surgery in the Indiana University School of Medicine at Indian-

apolis, spoke at an open meeting at the University (Bloomington) Thursday, February 5th. The meeting was sponsored by the Sigma Xi scientific society. Doctor Gatch spoke on "The Possibilities for Research in the Indiana University School of Medicine."

Dr. Wilbur K. Bond, who received the doctor of medicine degree from Indiana University in 1930, has been given a two-year scholarship in the New York City Postgraduate Hospital. Doctor Bond, who is from Green's Fork, Indiana, has been serving his interneship in a hospital in Springfield, Ohio. The scholarship was granted him following an examination in which he made the highest grade.

B. D. Myers, M.D., dean of the Indiana University School of Medicine at Bloomington, attended the Annual Congress on Medical Education, Medical Licensure and Hospitals at the Palmer House, Chicago, February 17th and 18th. After the conference at Chicago, he went to Washington, D. C., to attend the White House Conference on Child Health and Protection. Doctor Myers spoke at the first meeting on "The Relation Between the Association of American Medical Colleges and the Federation."

Frances T. Brown, Indianapolis, who will receive the doctor of medicine degree from the Indiana University School of Medicine in June, will be the first woman interne in the City Hospital, Indianapolis. Miss Brown completed her work for the degree at the end of the past semester. She is third in scholarship in her class at the medical school and is a member of Alpha Omega Alpha, honorary medical fraternity, and Nu Sigma Phi, woman's medical fraternity. Miss Brown will serve one year at the Indianapolis City Hospital, beginning her work this summer.

Miss Brown received her A.B. degree from Oberlin college in 1918 and then spent considerable time in reconstruction work in the United States Army Hospital in Washington, later teaching hygiene and physical culture at Ohio Wesleyan University and holding a position as associate professor of physical education in Lake Erie College.

The child guidance clinic of the Indiana University School of Medicine at Indianapolis was visited during February by Miss Clara Bassett, consultant in psychiatric social work of the National Committee for Mental Hygiene. Miss Bassett, who is a member of the staff of the Division on Community Clinics of the National Committee for Mental Hygiene, made the trip to Indianapolis as part of her studies in the field of psychiatric social work. She plans to visit periodically the leading clinics in this field. The I. U. clinic was included as one of the stops on her western trip. Miss Bassett makes these trips to keep in touch with the most recent developments and experience in the mental hygiene field in order to be of the greatest possible assistance to other communities just initiating their work.

Miss Bassett visited the I. U. clinic two years ago at the time it was first organized. While there this year, she spent her time visiting the chlid guidance clinic and consulting with members of the staff. Miss Bassett frequently has expressed interest in the growth and development of the I. U. clinic as an organization for the study of the mental health of children and the behavior problems for which parents, teachers and social workers have sought help.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

January 20, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held January 7th read and approved.

The release, "Louis Pasteur and Vivisection," is to be sent out for publication on January 31st.

Release, February 7, "Immunization Against the Infectious Diseases of Childhood."

Radio releases:

January 10—State Conference on Child Health and Protection.

January 17—"Appendicitis."

January 24—"Immunization Against the Infectious Diseases of Childhood."

Requests for speakers:

Jan. 23—Hendricks County Medical Society, Danville, Indiana. Speaker obtained to talk on "Some Newer Things in Obstetrics."

Feb. 17—Joint meeting of Bar Association of Delaware County and Delaware-Blackford County Medical Society, Muncie, Indiana. Speaker obtained to talk on "Expert Testimony in the Courts."

No Date—St. Joseph County Medical Society, South Bend. Specified speaker obtained to talk on some medical legal problems.

Speaking engagement filled:

Jan. 12—Bell Telephone Club, Indianapolis.

Vote on the final passage of the Jones-Cooper Bill in the Senate showed 56 for the bill and 10 against it. Senator Robinson of Indiana voted for the bill. The Congressional Record shows that Senator Watson had a general pair with Senator Smith. The latter was for the bill. When the roll was called he announced his cancellation of the pair with Senator Watson as Senator Watson was not present.

Program of the Annual Congress on Medical Education, Medical Licensure and Hospitals at Chicago, February 17th, 18th and 19th, brought to the attention of the Bureau. The Bureau decided to send one of its members to attend that conference.

Report brought to the attention of the Bureau that the Gibson County Medical Society voted unanimously in favor of the full-time health officer bill which is to be presented at the present session of the legislature.

The action taken by the Indianapolis Medical Society in regard to the repeal of the Wright bone-dry law limiting the right of a physician to prescribe medicinal whiskey was discussed by the Bureau. The secretary was instructed to get information from the Internal Revenue

office as to the rules and regulations in regard to medicinal whiskey in states other than Indiana.

The following bills were approved for payment:

W. K. Stewart Co.	$ 1.00
A. B. Dick Co.	3.50
	$ 4.50

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 27, 1931.

January 27, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting of January 20th read and corrected. The secretary was instructed to present them to the Bureau for final approval at the next meeting.

The release, "Basketball and Physical Examinations," prepared for publication February 14th.

Radio release—January 31—"Basketball and Physical Examinations."

Requests for speakers:

Jan. 29—School No. 43, Indianapolis: "Diet for Children."

June 4—Annual catfish dinner, Fountain-Warren County Medical Society, Covington, Indiana. Speaker obtained.

Report on medical meeting:

Jan. 12—Bell Telephone Men's Club, Indianapolis: "The New Public Health."

Representative of the Bureau of Publicity instructed to attend the annual Congress on Medical Education, Medical Licensure and Hospitals at Chicago, February 17th, 18th and 19th.

The attention of the Bureau was called to a somewhat sensational article in one of the leading magazines on the subject of fee-splitting. Full credit is not given in this article to the medical profession for its diligent and searching methods to eradicate this evil. While fee-splitting exists to some extent everywhere it has been mercilessly denounced by organized medicine and by the best members of the profession. The author of the article in question quotes from *The Indiana Journal of Medicine*. There is no such periodical.

Letters received from the Iowa State Medical Society and the Fulton County (Georgia) Medical Society requesting information concerning the work of the Bureau of Publicity. The secretary was instructed to send letters giving details in regard to the work of the Bureau along with copies of the last few annual reports of the Bureau and samples of releases.

The following letter was received from the Indiana Tuberculosis Association:

"At the meeting of our Executive Committee held on January 14, I was directed to extend the appreciation and thanks of the Indiana Tuberculosis Association to the Indiana State Medical Association for its endorsement of the bill for the creation of sanatorium facilities as proposed by the Indiana Tuberculosis Commission. Our association is very grateful to your body for the splendid cooperation and support given. Will you kindly extend this thanks also to the Bureau of Publicity of the Indiana State Medical Association for approving the Report of the Indiana Tuberculosis Commission?"

Letter received from the Librarian of the American Medical Association stating that no trace can be found of an article written by Dr. Matthew D. Mann on "Vivisection."

The following bills were approved for payment:

Bowers Envelope & Lithograph Co.	$24.63
Elmer T. Lefferson	2.00
	$26.63

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 3, 1931.

February 3, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held January 27th read, corrected and approved. The minutes of the January 20th meeting also were approved as corrected.

The release, "Mumps," prepared for publication February 14th.

As a result of the recent Linton mine disaster the secretary was instructed to prepare a release concerning the dangers of carbon monoxide gas.

Request for speaker:

Feb. 20—Hendricks County Medical Society, Danville. Speaker obtained.

Letter received from the chairman of the Entertainment Committee of the Bell Telephone Club expressing the appreciation of the club to the Bureau of Publicity in supplying a speaker for the Bell Telephone Club's semi-monthly meeting which was held on January 12th.

Letter received from the chairman of the Legislative Committee of the Vigo County Medical Society stating that the Vigo County Medical Society is opposing the full-time health officer bill as it "does not think this is best for all concerned."

Answers to the questionnaires in regard to full-time health officers received by the Bureau of Publicity. The secretary was instructed to compile and analyze this information for presentation to the Bureau at a future meeting.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 11, 1931.

February 12, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held February 3rd read and approved.

The release, "Rabies or Hydrophobia," read and approved for publication February 21st.

Radio releases:

Feb. 7—"Mumps."

Feb. 14—"Sinus Trouble."

Requests for speakers:

Feb. 19—Tri-County Medical Society, North Vernon, Indiana. Speaker obtained. Subject, "Cancer and State Medicine."

Feb. 20—Hendricks County Medical Society, Danville, Indiana. Speaker obtained. Subject, "New Concepts in Bacteriology."

Reports of medical meetings:

Jan. 29—Parent-Teacher Association, School No. 43, Indianapolis.: "Feeding the School Child."

Feb. 10—Hamilton County Medical Society, Westfield, Indiana: "Invasion of Syphilis."

Patent medicine advertisements in which is printed the photograph and testimonial of N. J. Benson, M.D., of Indianapolis, formerly of Vernon, Indiana, and a member of the Jennings County Medical Society, brought to the attention of the Bureau.

Bulletin of the Better Business Bureau of Indianapolis reviewing the work of the Better Business Bureau in this city in 1930 brought to the attention of the Bureau. The Bureau of Publicity was especially interested in the work of the Better Business Bureau in suppressing medical quackery. The Bulletin covers this subject as follows:

"Medical quackery has been opposed by the Bureau in a number of instances by bulletins, radio talks and newspaper warnings. The Tricho System, the Dunsworth Laboratories, both recognized as inherently dangerous meth-

ods of removing superfluous hair, the Theronoid Corporation selling an electric belt for $40 to $75 as a magnetic 'cure all,' and the Vit-O-Net Corporation a magnetic blanket which was held out as a mysterious electric healing power. In April, 1930, the Federal Trade Commission ordered the Vit-O-Net Corporation to cease its quackery and a complaint has been issued against the Theronoid Corporation. Both of these were opposed in Indianapolis by the Bureau and special Bulletins and other warnings issued against them."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 17, 1931.

February 17, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman, and Thomas A. Hendricks, executive secretary. Dr. J. H. Stygall and Dr. C. P. Emerson in Chicago attending Annual Congress on Medical Education, Medical Licensure and Hospitals.

Minutes of the meeting held February 12th read and approved.

The release, "Sinus Trouble," read and approved. It is to be presented, however, to several nose and throat men before its publication.

Radio release, February 28—"Rabies or Hydrophobia."

Speaking engagement:

Feb. 17—Joint meeting of Bar Association of Delaware County and Delaware-Blackford County Medical Society, Muncie: "Expert Testimony in the Courts."

Reports on the hearing before the Committee on Interstate and Foreign Commerce, House of Representatives, on Sheppard-Towner legislation received by the Bureau.

Report on hearings before the Committee on the District of Columbia of the United States Senate on Senate Bill 4497 (anti-vivisection bill) received by the Bureau.

Advertisement of book entitled "The Socialization of Medicine" received by the Bureau and the secretary instructed to order a copy of it.

The following bills were approved for payment:

Bailey Office Supply	$15.00
Central Press Clipping Service	5.00
Elmer T. Lefferson	2.00
	$22.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 25, 1931.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

Monthly Report, February, 1931

Every county in the state sent in disease reports, either positive or negative, except Brown. A general decline over the previous month is noted, except measles and influenza. The prevalent incidence is shown below by name and number of diseases from the urban and rural population:

Diseases	Total Reported	Urban	Rural
Tuberculosis	200	111	89
Chickenpox	497	413	84
Measles	3720	1767	1953
Scarlet fever	1407	567	840
Smallpox	432	294	138
Typhoid fever	6	2	4
Whooping cough	200	149	51
Diphtheria	174	117	57
Influenza	460	162	298
Pneumonia	74	28	46
Mumps	57	46	11
Poliomyelitis	0	0	0
Meningococcus meningitis	20	10	10
Undulant fever	2	1	1
Trachoma	5	0	5
Septic sore throat	17	1	16
Encephalitis	1	0	1

Measles. This is approaching measles time—1,253 cases reported the previous month, 256 cases the corresponding month, the preceding year. The disease goes in cycles. It is said now, perhaps, the new cycle is here.

Influenza. The report shows a sharp increase; 169 cases last month. The disease is quite prevalent throughout the country, especially down east. The larger cities in the state do not report influenza cases.

Scarlet Fever. The incidence of scarlet fever prevalence is not as great as it was last month when 1,559 cases were reported. The disease will subside as warm weather approaches. It is a cold weather disease. 985 cases were reported in February, 1930.

Smallpox. The disease shows a decided decline over the previous year. 809 cases were reported in February of 1930; 432 cases last month. It is about time the disease should decline. It is perennial, however. Vaccination and revaccination is the answer.

Diphtheria made a substantial decline over the previous month when 257 cases were reported. February of last year 146 cases. The estimated average over a period of seven years for February is 173 cases.

Typhoid Fever shows near a normal trend for the season; 7 cases last month.; 13 the same month last year. The estimated expectancy for a five-year period for February is 7 cases.

Meningococcus Meningitis shows a marked decline over the previous month; 53 cases were reported in January. 79 cases the corresponding month last year.

Septic Sore Throat. The incidence of septic sore throat is the only special to happen during the month; 16 cases were reported from Floyd county. One other case was reported from Randolph county.

INDIANA VENEREAL DISEASE CLINICS

Monthly Report, February, 1931

New cases (never previously admitted)	389
Total number of old cases and readmissions under treatment during month	5,178
Number of cases discharged as arrested or cured during month	196
Number of cases discontinued treatment without permission	204
Total number of cases remaining under treatment during month	5,167
Number of male syphilitic cases remaining under treatment during month	2,422
Number of female syphilitic cases remaining under treatment during month	1,529
Total number of syphilitic cases remaining under treatment during the month	3,951
Total number of treatments during month	12,094
Total number of visits to clinic for treatment, examination or advice	16,400

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	274
Gonorrhea	166
Chancroid	5

During the month five hundred twenty-four pamphlets were distributed. Four hundred twenty-three were mailed upon receipt of sixteen requests and one hundred one were sent to six people on our own initiative.

H. W. McKane, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

REPORT OF ANNUAL CONGRESS ON MEDICAL EDUCATION, MEDICAL LICENSURE AND HOSPITALS

The Congress was held at Chicago, February 17, 18 and 19, 1931.

Dr. Ray Lyman Wilbur in the opening address stated that all of us have to consider ourselves as possible future mental cases. The mental health of a nation is its greatest asset. He suggested five steps to improve conditions:

1. Medical students and physicians should have more adequate training in psychiatry.
2. There should be internes in hospitals for the care of the insane.
3. More research should be directed in the fields of psychology and psychiatry.
4. The public should be educated to view mental diseases as they do other diseases.
5. The handling of mental cases should be a medical problem rather than a legal one.

Dr. Charles P. Emerson in his paper on the present trend of medical education observed that the trend of medicine in various periods mirrored the culture of the people, and this being an age of mass production, we have similar methods in medicine. The large clinics with machine-like production tend to submerge the individuality of the physician. This he termed splendid business but mighty bad medicine.

Medical students are prone to accept laboratory reports as final and must be made to realize that proper interpretation is the important thing. The dollar standard should not apply to medicine and the doctor should think only in terms of service. The advancing edge of medicine is in the neuro-psychiatric field and it must be realized that many symptoms are the result of emotional disturbance. In a survey of a large group of operations Doctor Emerson found that eighty percent were operated on for symptoms which were not relieved by surgery. Students should be encouraged to have differences of opinion and not depend on systems of medicine as the last word. Endowed hospitals with complete diagnostic facilities should be at the disposal of the private practitioner.

Wilbur Davison, dean of the Duke University School of Medicine, spoke on the significance of present entrance requirements. He stated that the main purpose is to keep out the intellectually weak. However, the quality of preparation should be stressed, not the quantity. Eight hours of biology, eight hours of physics, and six hours of English are required, and the English should be doubled. The Oxford plan of one paper a week would do much to improve the students' English. French and German are not necessary today because important foreign papers are abstracted in English. At Johns Hopkins it was found that less than five percent of graduating students could read or write French and German, although on admission it was a requirement.

Culture is acquired by environment early in life and not in college. Too broad a curriculum makes for shallow learning. Two years of pre-medical college work is enough. If more is required the student will not want to spend the more important two or more years in hospital training.

Brains are more essential than preparation and excess candidates are eliminated as follows:

First and most important, each candidate must write a letter on a subject he is interested in.

Second, a confidential inquiry is sent to each of the student's science teachers.

Third, a personal interview is arranged with a regional representative of the medical school.

By this method there have been less than two percent of failures in the past five years in comparison with fifteen percent with the method depending only on preparation.

Dr. Paul D. Lamson, professor of pharmacology in Vanderbilt University School of Medicine, spoke on the present depression in pharmacology and stated that the future of pharmacology depends on a general study of abnormal relations between body tissues and chemical substances.

Dr. W. C. Rappleye, dean of Columbia University College of Physicians and Surgeons, spoke on methods of examining students in Europe. In Germany the medical course is of four years and entirely classroom work. The only clinical training the students obtain is what they can secure in hospitals during vacation. In Austria and Switzerland the system is about the same as in Germany. In France the course is primarily hospital work and extends for five years in most cases. Only about ten percent of the students secure a high enough rating to become licensed to practice in France. The Netherlands have the most comprehensive training in the world, with thorough classroom work and hospital training required for graduation. In Sweden students are required to put in eight to ten years, which is the longest course in Europe. In Great Britain anyone can practice without a license and there are very few medical schools that give degrees. The extramural schools have very good four-year courses but are not allowed to give degrees. Graduates of these schools may take examinations of the conjoint boards and be allowed to practice in the panel system. Many students licensed by the conjoint board have applied for licenses in the United States and have been somewhat of a problem, particularly in New York state. However, forty to fifty percent of them fail in the New York state license examination in comparison with ninety-seven percent of New York graduates passing. In Italy the medical course is rather short and superficial.

It is felt that a composite board of osteopaths, eclectics, homeopaths and regulars cannot compare with the ability of class A school faculty in determining what students are eligible to practice. The attitude of a candidate towards life is more important than entrance requirements.

The health of medical students has been neglected in this country and it is not unusual for students to break down from a preventable condition during their course. A complete physical examination should be an entrance requirement of medical schools.

Responsibility of Medical Schools of Registration and Licensure, Burton D. Myers, M.D. State board examinations were established through the efforts of leaders in medical thought. Johns Hopkins was the only medical school which required pre-medical college work for admission at the close of the nineteenth century. In 1903 Indiana was the fourth school to include such requirement. The state medical boards of licensure have performed an admirable duty in raising the standards of practicing physicians. They also have been of valuable aid in curbing the activities of the cults. However, the time has come when the graduates of class A medical schools should be admitted to practice without State Board examinations and such graduates should be allowed to practice in any state without further examination.

Dr. Henry Christian, Harvard University Medical School: The most potent early postgraduate instruction is a thorough hospital interneship. The majority of hospitals have too many patients for graduate study. These large hospitals have few real leaders in clinical teaching and the internes are not guided in the right channels. The only advantage derived from the classification of hospitals has been to force the very poor hospitals to improve their standards. The rest are contented with a class A rating.

Every hospital staff member should be a well-trained physician and should be retired from active service at a certain age period. Hospital staff members should spend time with the internes in examination and discussion of cases. Most important of all, a hospital should be a safe place for the patient. Hospitals without these requirements should be in class B. It is not necessary for a hospital to be associated with a medical school to be an excellent teaching institution for internes.

Two years should be the shortest interne service. The tendency of the times is for younger clinic chiefs to have

a narrow viewpoint in their particular specialty and not enough interest in other branches of medicine.

Doctor Christian stated that in his twenty-five or more years of service at a hospital in Boston he had not been consulted in regard to the nurses' training school. It is his impression that patients are not receiving as good hospital nursing care today as they did ten years ago. It appears there is too much shifting of nurses in the care of patients. He recommends that the first year of nurses' training should be entirely didactic work and then they would be prepared to take up the practical nursing work in the hospital.

Walter F. Donaldson, secretary of the Pennsylvania State Medical Association stated that the annual registration of physicians is practiced in twenty-five states and a small registration fee is not objected to. This system has been very beneficial and prevents the activities of quack physicians.

Sol Ullman, Deputy Attorney General of New York, explained how the unlicensed practitioner is controlled in New York. There is no function of government more important than the preservation of public health. The medical profession is the greatest profession and its members should assist in restricting the unlicensed practitioner. In New York the law definitely defines the practice of medicine and it is a penal offense to use the title doctor without a license. The law is administered by two deputy attorney generals and a number of inspectors. The inspectors gather evidence against shady practitioners and if possible the cases are disposed of by the judge because a jury trial makes convictions more difficult. Funds for administering the law are supplied by fines, and its administration is under jurisdiction of the board of education.

Mr. Ullman suggested that names of convicted quacks be sent to the American Medical Association and the information made available to other states. This would prevent unlicensed practitioners from moving about.

In 1926 when the law went into effect there were 4,000 unlicensed practitioners and 16,000 licensed in New York. In 1930 there were less than 1,000 unlicensed and 18,000 licensed.

William J. Mayo, M.D., of the Mayo Clinic, spoke on the preliminary training of the clinical specialist. Doctor Mayo advised a revision of the medical curriculum. The courses should be more flexible and if a student is interested in a particular phase of medicine it should be possible for him to have his course adjusted with that end in view. The science and art of medicine should be taught together and students should have contact with clinical cases from the beginning. The specialist course should be optional and a few years of general practice before entering a specialty should be compulsory. A better understanding of human emotions should be emphasized in medical training.

Dr. E. H. Corwin of the New York Academy of Medicine spoke on "Rehabilitation and Convalescent Care." He stated that Florence Nightingale stressed the value of convalescent care years ago. In a survey made in New York City twenty percent of the cardiac cases, forty-five percent of the respiratory group, and twenty-one percent of the dietetic group needed convalescent care, and altogether about fifty percent of medical cases needed this service. A large percentage of surgical cases are suitable for convalescent care and the orthopedic cases particularly are in need of vocational training.

Dr. C. O. Molander, director of physical therapy, Michael Reese Hospital, Chicago, spoke on physical therapy in teaching hospitals. He stated that the service must be sold to the medical profession and the public. Physicians generally are indifferent to the value of physical therapy and very few medical schools teach it. At Michael Reese the service has proved its value and the volume of work has increased. Every large hospital should have a physical therapy department under the direction of a trained physician.

Dr. Frank Billings, of Chicago, spoke of the barbaric methods in insane hospitals twenty years ago and how he instituted occupational therapy and hydrotherapy to displace various methods of restraint.

Dr. Harry Mock, president of American Conference on Hospital Service, stated that there is no sharp line of demarcation between physical therapy, occupational therapy, and vocational training. They all should be included in the same department. There should be convalescent homes or hospitals to give this service. At present patients are barely able to totter from the hospital on discharge and many cases should be graduated to a convalescent home before release.

Impressions of meeting:

1. A general sentiment to grant graduates of class A medical schools a license without further examination.
2. The annual registration of practicing physicians and cults is a desirable thing.
3. The medical school curriculum needs adjustment.
4. The quality of medical students is more important than the quantity of premedical preparation.
5. At least one thorough physical examination should be required of medical students.
6. The convalescent care of patients is a neglected field of medicine.

Respectfully submitted,

(Signed) James H. Stygall, M.D.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met January 27, 1931, in the Public Library, with Dr. Marcus Lyon, president, in the chair.

Dr. Milo Miller, a pediatrician, was elected by the society to take charge of section one on Medical Service of the St. Joseph County Conference on Child Health and Protection.

A communication from Miss Baker, librarian of the Public Library, was read, giving a list of medical journals subscribed to and bound for the medical section.

The paper of the evening was given by Dr. C. M. Fish on "Carcinoma of the Rectum and Colon." Doctor Fish urged the recognition of cancer of the large bowel in the early stage before obstruction is produced. As the symptoms are few—in the early stage when it is purely local—it can be diagnosed only by a local examination. Shortly cancer of the rectum spreads intramurally and extramurally. The growth first occurs in the epithelial lining of the bowel, then ulceration with replacement of normal epithelium with cancer cells which spread along submucus layer rich in lymphatics and involvement of glands behind the rectum and the mesorectum. As the lymphatics pass in a circular direction around the bowel they spread the cancer in a circular direction, thus producing a stricture.

There are two kinds of cancer of the rectum and colon —epithelioma and adenocarcinoma; the former occurs at the anal margin and the latter starts in the mucosa and occurs in the rectum.

The most common adenocarcinoma is more or less nodular or cauliflower-like growth in the mucosa projecting into the bowel lumen. Its surface may or may not be ulcerated. Where the bowel is covered with peritoneum on the outside of the bowel over the base of the tumor there is a scarlike depression with a narrowing of the lumen. Rarely it exists as a polypus hanging loose in the bowel lumen.

This type of cancer is classified as *A* growth extending into the submucosa and not into the muscle coat; *B* growth extends into the muscle coat but not spread by direct continuity into the perirectal tissue, and *C* growth spread by direct continuity into the perirectal tissue.

The dependent parts of the colon are affected most commonly and almost invariably primary.

Secondary results are intestinal obstruction, hypertrophy and dilatation, kink due to adhesions to other organs or to a mesenteric shortening; ulceration especially in rectum and spontaneous anastomosis, anemia.

Symptoms depend on type, location, size and stage. At first pain is trivial—vague abdominal or rectal uneasiness and mild digestive disturbances. Later well-marked attack of constipation followed by steadily

increasing diarrhea. Diarrhea on rising in morning without definite cause, mucus or blood in stool should make one suspicious of cancer. In such cases repeated examination of feces for blood should be made. In later stages pain is constant, sharp attacks of colic sometimes three or four hours after food or pain in relation to defecation, loss of weight, diarrhea, pipestem feces if growth involves the anus, obstruction partial or complete, abdominal distention, nausea, fecal vomiting, muscular rigidity, elevated temperature, occur.

Examination should be with the bowel empty and patient in a squatting position and straining down. Growths high up in rectum and in sigmoid flexure may be felt through anterior wall. Small portion of growth for biopsy may be removed for examination if electric prothoscope or sigmoidoscope is used. Indications for colostomy are: (1) Growth in lower pelvic colon with persistent diarrhea, (2) losing weight or becoming toxic and anemic, (3) large ulcer, sensitive to passage of fecal matter, (4) acute obstruction giving toxic symptoms, (5) no radium until after preliminary colostomy, (6) growth found after exploratory laparotomy large and inoperable. Fatal termination is generally from secondary consequences as acute obstruction toxemia, acute peritonitis from perforating ulcer or from extensive suppuration.

Doctor Fish's paper was followed by many x-ray slides illustrating normal and cancerous conditions of the rectum and colon by L. F. Fisher.

The paper was discussed by Doctors Bosenbury, Wilson, Baker and Green.

The St. Joseph County Medical Society met February 3, 1931, in the Public Library, the president, Dr. Marcus Lyon, in the chair.

The application of Dr. W. L. Spalding, of Mishawaka, to membership was referred to the Board of Censors.

Doctor Geisler, chairman of the Legislative Committee, discussed the various bills of medical interest that are being considered by the State Legislature.

The paper of the evening was given by Dr. J. M. Gordon on "Electrocardiography," illustrated. The following abstract was given by Doctor Bishop, one of the discussants, others of whom were Doctors Bosenbury, Marcus Lyon and Giordano.

Doctor Gordon commenced his talk with a brief description of the mode of production of the different heart waves—P-wave, Q-R-S complex and T-wave. These are not due to the actual contraction of the heart but to the impulse spreading through the auricles and ventricles before contraction. He described the normal height, duration and shape of the waves in the three leads. He explained right and left ventricular preponderance. Many interesting tracings were shown of heart conditions seen clinically—ectopic beats arising from a single focus in the auricle and ventricle—ectopic beats arising from two distinct foci in the auricle and ventricle and their clinical significance was explained. The difficulty at times of diagnosing these from cases of auricular fibrillation was emphasized. Tracings of auricular fibrillation, heart block, bundle-branch block, arborization block, and others were shown and described.

Of special interest was a case of mesaortitis luetica and aortic regurgitation that had been diagnosed by Doctor Gordon seven years previously and treated by arsenicals and mercury which clinically at the present date seemed in fair condition. The electrocardiograph tracing corroborated the clinical findings although an inverted T-wave in each of the three leads is evidence of the existing myocarditis.

The value of the electrocardiograph as an aid to diagnosis in coronary disease—occlusion and narrowing of the coronary vessels was nicely illustrated in several tracings by the peculiar form of the T-wave and the upward convexity of the R-T or S-T interval.

The St. Joseph County Medical Society held its dinner meeting for the month at the Knights of Columbus building February 11, 1931.

F. W. Hartman, M.D., pathologist at the Henry Ford Hospital, Detroit, Michigan, spoke on "Some of the Newer Aspects of the Nephritic Problem." Doctor Hartman after a short introduction, in which he discussed nephritis, gave some of the details of his experiments with dogs, following toxic doses of x-ray upon their kidneys and other toxic substances. By means of slides he showed graphically just what happened clinically to the dogs as well as the pathological findings after death. Doctors Giordano, Hoffman and Helman asked a number of interesting questions.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

INDIANAPOLIS MEDICAL SOCIETY

February 23, 1931.

The program for the meeting of the Indianapolis Medical Society on December 9, 1930, was as follows:

1. "Childhood Lung Conditions"—Dr. J. H. Stygall
2. "Some Recent Methods in the Treatment of Head Injuries"—Dr. J. V. Reed

Discussion: Drs. O. N. Torian, E. Vernon Hahn and Larue D. Carter.

The Indianapolis Medical Society had as its guest speaker at the regular meeting on December 16, 1930, Dr. Floyd T. Romberger, of Lafayette, Indiana. His subject was: "Safeguards in the Technique of Modern Spinal Anesthesia."

Guests at this meeting were Dr. David Crockett, of Lafayette, Indiana, president-elect of the Indiana Medical Society, and Dr. J. C. Burkle, secretary of the Tippecanoe County Society.

The annual meeting on January 6, 1931, was officially designated as "ladies' night." This was a dinner meeting served in the Crystal Ballroom of the Marott Hotel. Dinner was served to 200. After the dinner the new officers were installed and the reports of the outgoing officers were received. The subject of Doctor MacDonald's address was "Trends in Modern Medicine."

At the conclusion of the short business session the guests were delightfully entertained by a program of classical music. Soloists were: Mrs. Helen Warrum Chappell, soprano, and Vaughn Cornish, baritone. Pianist: Bomar Cramer. The dinner music was furnished by the Ruick String Trio and Mrs. Ruick served as accompanist for Mrs. Chappell and Mr. Cornish.

January 13, 1931. This was the regular meeting and was held at the Athenæum at 8:15 p. m. Attendance 100. Resolutions concerning the Wright Bone Dry Law and statements regarding the medical profession reported to have been made by E. A. Miles of the Anti-Saloon League were presented by Dr. Wm. N. Wishard, Sr. After lengthy discussion this resolution was adopted by a vote of 86 to 1. This resolution would indicate that the eighty-six doctors voting for it were in favor of an amendment to the Wright law which would permit doctors to prescribe whiskey. Copies of this resolution were sent to the secretaries of all county societies and to each member of the state legislature.

The scientific program was as follows: Case reports:

1. "Gall-stones and Colon Diverticulosis"—W. E. Pennington, M.D.
2. Case Report—C. F. Kercheval, M.D.
3. Lantern Slide Demonstration—E. B. Mumford, M.D.
4. "Tularemia with Suppurative Axillary Adenitis"—Dudley Pfaff, M.D.
5. "Common Duct Stones"—Cleon A. Nafe, M.D.
6. "Oesophogeal Fistula"—H. M. Trusler, M.D.

January 20, 1931. The regular meeting of the society was held at the Athenæum at 8:15 p. m. Attendance 100. Doctor Clark presided. After a short business session the scientific program was presented:

1. "Extrinsic and Intrinsic Innervation of the Heart. The Pain Pathways from the Heart, with Explanation of the Manner of the Pain Origin. Discussion of Segmental and Supra-Segmental Hypersensitization"..... Albert E. Sterne, M.D.

Discussion: Drs. George S. Bond, Robert M. Moore and Robert L. Glass.

January 27, 1931. The regular meeting of the society was held at the Athenæum at 8:15 p. m. Attendance 100. Dr. Thomas W. DeHass was elected to honorary membership. The scientific program was as follows:

1. "Intravenous Pyelography"..... Wm. N. Wishard, Jr.
2. "Incidence of Syphilis in Private Practice—an Analytical Study of 2,329 Cases Based on Serological Tests"..... Drs. Edgar F. Kiser and C. B. Bohner

Discussion: Drs. H. O. Mertz and A. E. Sterne.

February 3, 1931. The regular meeting of the society was held at the Athenæum at 8:15 p. m. Doctor Clark presided. Attendance seventy-five. The scientific program was as follows: Case reports:

1. "Retro-cecal and Retro-peritoneal Gangrenous Appendix Attached in the Right Hypochondriac Region"..... Simon Reisler, M.D.
2. "Carcinoma of Lung"..... O. B. Norman, M.D.
3. Case Report..... C. D. Humes, M.D.
4. "Labyrinthitis Treated by Physio-therapy"..... Carl B. Sputh, M.D.
5. Case Report..... H. F. Nolting, M.D.
6. Case Report..... W. D. Little, M.D.
7. "Interesting Bone Tumor"..... R. C. Beeler, M.D.

Discussion: Doctors Dearmin, Rust, King, Tomlin, Clark, Moore, Weil and Jackson.

February 10, 1931. The regular meeting of the society was held in the Auditorium of the Medical School at 8:00 p. m. Attendance 300. This was a clinical meeting arranged through the courtesy of Dean Emerson. The program was given by the resident staff and Professors Turner and Harman, of the University. The program was as follows:

1. "Case of Acute Mastoiditis with Symptoms of Meningitis"..... Dr. Russell Sage
2. "Infectious Involvement of the Seventh Nerve Following Mastoidectomy"..... Dr. Robert Meiser
3. "Banti's Disease"..... Dr. Herbert Call
4. "The Sympathetic Nervous System"..... Dr. Paul Harman
5. "An Obstetrical Problem"..... Dr. Dwight L. DeWees
6. "Three Cases of Anterior Poliomyelitis"..... Dr. George Garceau
7. "Tuberculous Kidney with Nephrectomy"
   "Umbilical Hernia with Tumor Mass" } Dr. Jack Pilcher
8. "300 Years After William Harvey and 100 Years After Frederick Wohler"..... Prof. B. B. Turner
9. "'Jake' Paralysis"..... Dr. John Greist
10. "Zenker's Diverticulum"..... Dr. Edward G. Billings
11. "Pituitary Tumor"..... Doctor Greist
12. "Syphilitic Meningitis"..... Doctor Billings
13. "Post-traumatic Cellulitis"..... Doctor Billings

February 17, 1931. The regular meeting of the society was held at the Athenæum at 8:15 p. m. Attendance seventy. The scientific program was as follows:

1. "Popularizing Rectal Ether Analgesia in Obstetrics"..... C. O. McCormick, M.D.
2. "Pseudo-mucinous Peritonitis"..... E. E. Padgett, M.D.

Discussion: Drs. Foster Hudson, David Smith, Horace M. Banks, Elmer Funkhouser, Petranoff, Gustafson, Kast and Mendenhall.

CHESTER A. STAYTON, M.D.,
Secretary.

VANDERBURGH COUNTY MEDICAL SOCIETY

The regular meeting of the Vanderburgh County Medical Society was held Tuesday, February 10, 1931, at the Y. W. C. A. in Evansville. A banquet preceded the meeting. The Woman's Auxiliary of the Vanderburgh County Medical Society and the Vanderburgh County Tuberculosis Society were also in attendance at the meeting and banquet.

Dr. W. L. Smith was admitted as a member of the society.

A resolution was adopted that the secretary send a telegram to the surgeon general's office requesting that Dr. K. E. Miller be retained as director of the U. S. Marine Hospital. Dr. K. E. Miller, who has been in charge of the U. S. Marine Hospital for the past three years, has made a wonderful record.

Dr. Stewart Prichard, medical adviser of the Kellogg's Foundation and vice-president of the National Tuberculosis Association, was the speaker of the evening and gave a talk on "Thoracic Pains."

Murray A. Auerbach, executive secretary of the State Tuberculosis Association, spoke briefly on the bill before the legislature for the creation of a tuberculosis sanitarium in southern Indiana, and urged support of the bill.

Mrs. Helen Marshall, executive secretary of the Vanderburgh County Tuberculosis Association, gave a report of the year's work in which she showed that the present death rate is 84.7 per 100,000, whereas in 1915 it was 236.3.

KEITH T. MEYER, M.D.,
Secretary.

CORRESPONDENCE

STATE MEDICINE

Indianapolis, February 20, 1931.

Editor THE JOURNAL:

Medical service in America, with the exception of that for the wealthy and the very poor, is entirely inadequate. The wealthy can pay for whatever attention they require, and the very poor can turn to charitable institutions where as a rule they will receive fairly good care. However, those of the great intermediate group, composing some 50 to 60 per cent of our population, when stricken by any illness of a serious nature, are unable to pay for adequate medical attention and consequently are either neglected or kindly disposed physicians are forced to give an enormous amount of time and energy without remuneration.

This situation is highly unsatisfactory to all concerned and if the profession does not find a remedy soon, the public will intervene. That remedy, State Medicine, will, I fear, be a rather sorry compromise, for as long as medicine remains an art it can not be practiced mechanically. While it might be more efficient from a business standpoint to have the state pay a physician in each given area a fixed salary, and require the people in that area to go to that physician, it certainly would tend to destroy incentive in the physician, and probably would reduce the practice of medicine to a low and largely mechanical plane.

If this condition is to be avoided we of the professino must act quickly. There seems to be but one solution to the problem, namely, budgeting medical expenses, and this in turn may be worked out in two different ways. First, as has in some instances been tried, the physician, or perhaps a group of physicians, if they have a large financial backing, may go to all their patients and say, "From now on my medical services will be sold by the year, and your monthly medical budget, according to the numher in your family, will be so much, and this will include house calls, office calls, and complete hospitalization whenever necessary for you or your family."

This plan would be opposed by many physicians because it would put at a disadvantage those who lacked the rather large financial backing necessary to operate such an enterprise. However, there seems to be still another way out, to which I believe no fair minded member of the profession could object, and that would be for the American Medical Association to appoint a committee to meet with a group of representatives of "Old Line" insurance companies and together to draw up a policy which would be known as a Medical and Surgical Service Policy, and which would contain the following provisions:

1. Patient may choose his own physician.
2. Policy benefits to be paid directly to physicians and hospitals.
3. In order to avoid disputes between physicians and insurance companies there shall be a definite scale of prices set for house calls, office calls, and various surgical procedures. This scale of prices shall not limit the fee where the individual is able to pay more, but shall serve rather as a minimum guarantee to the physician and to the hospital.
4. A physical examination should be made of all applicants.
5. A limiting clause should be inserted specifying the number of calls per month permitted in chronic conditions.

If such a policy were available it would go a long way toward solving many of the financial problems of both the physician and the patient, and perhaps enable us to avoid State Medicine.

E. R. WILSON, M.D.

CHIROPRACTIC MALTREATMENT

Paragon, Indiana, Feb. 25, 1931.

Editor THE JOURNAL:

A short time ago I was called to hold an inquest over the body of a middle-aged man who had died very suddenly from pulmonary hemorrhage. His wife told me that he had been feeling badly for about one year; complained of slight pain in thorax with a cough, slight at first, which became much worse as his condition became worse. There was profuse expectoration of a yellow, thick material. He had lost thirty or forty pounds in weight, was unable to do any work the last five weeks. He was reading his newspaper the day he died when he had the hemorrhage from which he died in about five minutes.

I inquired about the treatment and why it was a coroner's case, as I supposed he had been treated by a physician. She told me that a "chiropractor doctor" had treated him and that he was not allowed to sign a death certificate. On further inquiry she told me that the chiropractor said that the patient had "neuritis of the chest," and treated him for that all through his illness. (I suppose that it would make no difference what the disease was, as I think they treat them all alike.) The deceased's brother called on the chiropractor after the patient's death and talked the matter over, and the chiropractor told him that there was absolutely no trouble in the patient's lungs.

The family was very much chagrined over the results of the chiropractor's adjustments, but too late. How long, Oh! how long will people tolerate such conditions?

J. H. MCNEILL,
Coroner Morgan County.

EXTENDING MEDICAL SERVICE BY THE STATE

Indianapolis, February 19, 1931.

Editor THE JOURNAL:

I wish you to know how I appreciate your editorial on "Bacteriophage Free in Illinois" in the current number of THE JOURNAL received this morning.

If the state extends medical service to a point where it encroaches on the private practitioner, the manufacturer, and the merchant, it tends to destroy the sources of revenue on which it lives. It pauperizes the public and the ultimate result will be the pauperization of the state also. As you point out so clearly, the tendency is vicious.

There is an inclination on the part of the state boards and other institutions supported by public funds to extend their service in various ways, partly with a view to justifying demands for increased appropriations. Many times the extension for such service is entirely outside what may be proper governmental functions—certainly out of harmony with the original American ideals of government.

I am glad that you speak so definitely on this subject in the editorial pages of THE JOURNAL.

Very truly yours,
JOHN S. WRIGHT.

WET FANATICISM

Inspired by the several anti-prohibition articles in THE JOURNAL last month, I respectfully request the privilege of presenting a few thoughts on the dry side of the medicinal liquor controvery. Your statement that "There isn't a single reputable physician in the state who will not resent the insults that repeatedly have been heaped upon the heads of physicians," seems a little far-fetched or exaggerated when the real facts are considered. From South Bend alone the names of seventy-six physicians (nearly two-thirds of the total number of doctors in the city) were sent to Indianapolis, protesting against changing the law; while four out of the five physician members of the legislature voted against the change. In view of the foregoing, we realize that most useful among the blessings bestowed on mankind is the sense of humor. One must often use this sense to save himself—"Better laugh than cry" at the fanatical statements made to justify the activities of the wets! For instance, this recent representation of the whole profession as a group of noble characters, with infinite wisdom and unquestioned integrity, mortally "insulted" because they are not privileged to sell whiskey to patients! It is to laugh! No well-informed physician, if honest, can deny that there is still a question as to the medical value of liquor; moreover, if it *is* of any use as a medicine, he knows that the value lies entirely in the alcohol, which any doctor can secure license to use. The honest physician also must acknowledge that, where the law allows the prescribing of liquor as a medicine, the privilege is extensively abused. Thirty patients diagnose their own diseases and pay big prices for the desired whiskey prescriptions. Having been for many years a member of medical societies, and personally knowing very many honest doctors, I find it hard to visualize these men as so sensitive and thin-skinned that they rise in indignation at the suggestion that a bootlegger might develop in their midst! One could laugh at the absurdity of the "insult" were it not accepted seriously by folks who have been confused by so much damp camouflage. It *is* true that no profession on earth has so many noble, self-sacrificing and generous men as are found in the medical profession, but—they are not *all* angels (yet)! As in every other profession, there are also found unprincipled, cheap, unmoral, men, with no regard for ethics, who will do anything for money. This type of man is the curse of our civilization, retarding progress and blighting the fair name of medical as well as legal organizations. It is to make more difficult the dishonest activities of this kind of citizen that this law was passed. The physician who gives unprejudiced thought to the subject is thankful for legislation to relieve him of the job of turning down the countless applications for beverage prescriptions. Even if honestly objecting to the eighteenth amendment, many doctors also object to being made instruments for distributing booze. A recent federal raid in New York City uncovered a liquor prescription syndicate, involving one thousand physicians and four hundred druggists. This

syndicate has secured millions of dollars by diverting medicinal liquor, through illegal use of prescriptions. How, in the face of such facts, can any one honestly want the law changed to legalize such operations in our own Indiana?

F. P. Eastman, M.D.,
South Bend, Indiana.

(There is nothing in the editorials mentioned to which reasonable exception can be taken. As already stated, "The objections of members of the medical profession to Indiana's Bone Dry Law should not be construed as objection to the Eighteenth Amendment or Volstead Law." The value of alcoholic liquor as a medicinal agent may be a controversial subject, and the advisability of permitting physicians of Indiana to have the privileges accorded them by the Volstead Act may be a perfectly reasonable subject for debate, but that is no excuse for calling physicians in general "booze fighters" and "medical bootleggers" because a large percentage of them honestly believe that they should be free to exercise their scientific judgment as to what they shall prescribe for their patients, or because a few of their number may abuse the privilege. To repeat what was said in the editorial to which exception has been taken, "If any cause is worthy of support it should stand on its merits, and it will have a better chance of winning if the arguments presented are logical and truthful. It stands a good chance of losing supporters among a great many intelligent people if the sponsors for the cause use vilification and insult to not only those who may be opposed to the cause but to many others who naturally support a cause if presented in its proper light.—Ed.)

BOOK REVIEWS

Books received since February 1, 1931:

Calcium Metabolism and Calcium Therapy. By Abraham Cantarow, M.D., Assistant Demonstrator of Medicine in the Jefferson Medical College, Philadelphia; with a foreword by Hobart Amory Hare, B.Sc., M.D., LL.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia. 215 pages. Flexible binding. Price $2.50. Lea & Febiger, Philadelphia, 1931.

The Practical Medicine Series. Comprising Eight Volumes on the Year's Progress in Medicine and Surgery. General Medicine. Edited by George H. Weaver, M.D., Lawrason Brown, M.D., George R. Minot, M.D., William B. Castle, M.D., William D. Stroud, M.D., and Ralph C. Brown, M.D. Series 1930. 848 pages. Cloth. Price $3.00. The Year Book Publishers, Chicago, 1930.

Modern Methods of Treatment. By Logan Clendening, M.D., Professor of Clinical Medicine, Lecturer on Therapeutics, Medical Department of the University of Kansas, etc. Chapters on special subjects by H. C. Andersson, M.D., J. B. Cowherd, M.D., H. P. Kuhn, M.D., Carl O. Rickter, M.D., F. C. Neff, M.D., E. H. Skinner, M.D., and E. R. DeWeese, M. D. Fourth edition. Illustrated. 819 pages. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1931.

Handbook of Diseases of Children. Including Dietetics and the Common Fevers. By Bruce Williamson, M.D., Edin., M.R.C.P., London, Physician to the Royal Northern Hospital, London, etc. 290 pages, profusely illustrated. Flexible binding. Price $3.50. William Wood & Company, New York, and E. & S. Livingstone, Edinburgh, 1931.

A Manual of the Common Contagious Diseases. By Philip Moen Stimson, A.B., M.D., Associate in Pediatrics, Cornell University Medical College; attending physician, Willard Parker Hospital, etc. 351 pages, illustrated. Flexible binding. Price $3.75. Lea and Febiger, Philadelphia, 1931.

Cancer. Its Origin, Its Development and Its Self-Perpetuation. A research by Willy Meyer, M.D., Consulting surgeon to the Lenox Hill and Postgraduate Hospitals, New York Infirmary for Women and Children, etc. 427 pages. Cloth. Price $7.50. Paul B. Hoeber, Inc., New York, 1931.

Operative Obstetrics on the Manikin. For students and practitioners. By Charles B. Reed, M.D., F.A.C.S., Associate Professor of Obstetrics, Northwestern University Medical School, Chicago. 314 pages, with 254 illustrations. Cloth. Price $4.00. P. Blakiston's Son and Co., Inc., Philadelphia, 1931.

Book review:

Physics of Radiology. For the Student of Roentgenology and Radium Therapy. By J. L. Weatherwax, M.A., Physicist, Philadelphia General Hospital, Associated in Radiotherapeutic Physics, University of Pennsylvania Graduate School of Medicine. Foreword by Henry K. Pancoast, M.D., Professor of Roentgenology, University of Pennsylvania. 240 pages with 126 illustrations. Flexible binding. Price $5.00. Paul B. Hoeber, Inc., New York, 1931.

This volume is intended as a textbook in the teaching of radiological physics. It also serves another purpose in keeping the older radiologist informed on many of the present problems with which he will be confronted.

The laws of electricity and physics of Roentgen rays are described in a clear and well-arranged manner. Fifty-seven pages are given to Roentgen ray spectrum, absorption of various substances, quality of rays, kinds of tubes and the most practical ways of measurement of x-ray dosage. Sixty-four pages are devoted to the practical application of radiation, in using graphs, saturation curve equations and routine evaluation of dosages. All of these subjects are treated in a clear-cut way so that the average radiologist can familiarize himself with the technical problems in a better understood manner. He describes in detail the method of reaching and maintaining saturation doses and gives warnings where needed.

The book contains two hundred and forty pages and is well executed by the publisher and the many illustrations are made carefully. It should be read by all interested in the subject.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

Diphtheria Toxoid.—This product (*Jour. A. M. A.*, November 15, 1930, p. 1505) is also marketed in packages of ten immunization treatments containing two 1 cc. vials of diluted diphtheria toxoid for the reaction test and twenty 1 cc. vials of diphtheria toxoid for treatment; in packages of fifteen immunization treatments containing one 1 cc. vial of diluted diphtheria toxoid for the reaction test and one 30 cc. vial of diphtheria toxoid for treatment. Lederle Laboratories, Inc., Pearl River, N. Y.

Schick Test.—A diphtheria immunity test (New and Nonofficial Remedies, 1930, p. 380) marketed in packages of one capillary tube containing undiluted diphtheria toxin standardized, sufficient for ten tests, accompanied by sterile diluent; in packages of one capillary tube containing undiluted diphtheria toxin standardized, sufficient for fifty tests, accompanied by sterile diluent; in packages of two capillary tubes containing undiluted diphtheria toxin standardized, sufficient for one hundred tests, accompanied by sterile diluent. As a means of control the Schick test control is supplied. National Drug Co., Philadelphia.

Ephedrine Hydrochloride-Gane and Ingram.—A brand of ephedrine hydrochloride—N. N. R. (New and Nonofficial Remedies, 1930, p. 169.) Gane and Ingram, Inc., New York.

EPHEDRINE SULPHATE-GANE AND INGRAM.—A brand of ephedrine sulphate-N. N. R. (New and Nonofficial Remedies, 1930, p. 170). Gane and Ingram, Inc., New York.

TUBERCULIN OLD (HUMAN).—Tuberculin-Koch (New and Nonofficial Remedies, 1930, p. 358) marketed in single 1 cc. vial packages; also in packages of one 4 cc. vial. National Drug Co., Philadelphia. (*Jour A. M. A.*, January 3, 1931, p. 39).

POLLEN EXTRACTS-CUTTER.—The following pollen extracts-Cutter (New and Nonofficial Remedies, 1930, p. 31) have been accepted: Oak Pollen Extract-Cutter; Western Ragweed Pollen Extract-Cutter; Western Water Hemp Pollen Extract-Cutter. Cutter Laboratory, Berkeley, Calif.

WINTHROP VIOSTEROL IN OIL 250 D.—A brand of viosterol in oil 250 D-N. N. R. (New and Nonofficial Remedies, 1930, p. 410; *Jour. A. M. A.*, October 4, 1930, p. 1021). Winthrop Chemical Co., Inc., New York. (*Jour. A. M. A.*, January 24, 1931, p. 271).

TETANUS GAS GANGRENE ANTITOXIN (LEDERLE) REFINED AND CONCENTRATED. — An anaerobic antitoxin (New and Nonofficial Remedies, 1930, p. 343) prepared by immunizing horses with gradually increasing doses of the toxins of *B. tetani, B. perfringens,* and Vibrion septique. The toxins are individually prepared. The product is marketed in packages of one syringe containing one prophylactic dose, stated to represent tetanus antitoxin, 1,500 units, perfringens antitoxin 1,000 units and Vibrion septique antitoxin 10 units. Lederle Laboratories, Inc., Pearl River, N. Y.

GAS-GANGRENE ANTITOXIN (POLYVALENT) REFINED AND CONCENTRATED, WITHOUT TETANUS ANTITOXIN.—An anerobic antitoxin (New and Nonofficial Remedies, 1930, p. 343) prepared by immunizing horses with subcutaneous injections of gradually increasing doses of the toxins of *B. perfringens,* Vibrion septique, *B. œdematiens, B. sordelli* and *B. histolyticus.* The toxins are individually prepared. The product is marketed in vials containing one minimum therapeutic dose, stated to represent perfringens antitoxin 10,000 units, Vibrion septique antitoxin 100 units, *B. œdematiens* antitoxin 200 units, *B. sordelli* antitoxin 200 units, and *B. histolyticus* antitoxin 25 units. Lederle Laboratories, Inc., Pearl River, N. Y.

TABLETS AMYTAL, ¾ GRAIN.—Each tablet contains amytal (*Jour. A. M. A.*, October 18, 1930, p. 1178), ¾ grain. Eli Lilly & Co., Indianapolis.

AMPULES GOLD SODIUM THIOSULPHATE-ABBOTT, 0.01 GM.—Each ampule contains gold sodium thiosulphate-Abbott (*Jour. A. M. A.*, December 20, 1930, p. 1913), 0.01 Gm. Abbott Laboratories, North Chicago, Ill.

SULPHARSPHENAMINE-METZ, 0.75 GM. AMPULES.—Each ampule contains sulpharsphenamine-Metz (New and Nonofficial Remedies, 1930, p. 72), 0.75 Gm. H. A. Metz Laboratories, Inc., New York.

SULPHARSPHENAMINE-METZ, 0.9 GM. AMPULES.—Each ampule contains sulpharsphenamine-Metz (New and Nonofficial Remedies, 1930, p. 72), 0.9 Gm. H. A. Metz Laboratories, Inc., New York.

SULPHARSPHENAMINE-METZ, 3.0 GM. AMPULES.—Each ampule contains sulpharsphenamine-Metz (New and Nonofficial Remedies, 1930, p. 72), 3.0 Gm. H. A. Metz Laboratories, Inc., New York. (*Jour. A. M. A.*, January 31, 1931, p. 357.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

H-O HORNBY'S OATS (REGULAR H-O OATS) (Hecker H-O Co., Inc., Buffalo, N. Y.) Oat flakes made from lightly toasted, steam-cooked, whole oat groats. A breakfast cereal. The product contains: moisture, 8 per cent; mineral matter, 2 per cent; fat, 7.3 per cent; protein, 15.2 per cent; crude fiber, 1.3 per cent; carbohydrates, 66.2 per cent. The product contains vitamin B (complex) and E such as are natural to oats. (*Jour. A. M. A.*, January 10, 1931, p. 115).

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following has been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of Accepted Devices for Physical Therapy:

NATIONAL VAPORIZER.—This apparatus is designed for the purpose of vaporizing oil or aqueous solutions and atomizing very fine impalpable powders. The apparatus contains no metal valves or parts that may oxidize or stick together. It is so constructed that it enables almost the entire solution to be vaporized. The apparatus is relatively fragile. National Drug Co., Philadelphia. (*Jour. A. M. A.*, January 24, 1931, p. 271).

PROPAGANDA FOR REFORM

AVESAN (II) NOT ACCEPTED FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Avesan (II), according to the Avesan Chemical Co., Los Angeles, is "Indicated in tuberculosis, asthma, bronchitis and bronchiectasis" and stated to be "Effective in minor disturbances of the respiratory organs." The product is supplied in ampules and is administered subcutaneously. It is stated to be "a purely chemo-therapeutical product" which is "composed of formic acid, sodium nuclienate, camphor, allyl sulphide and chlorophyl with traces of salicin and sulphuric ether." After considering the available evidence and information, the Council declared Avesan (II) inadmissible to New and Nonofficial Remedies because no acceptable evidence for the efficacy and rationality is presented, because unwarranted claims are made, and because no evidence was supplied to show that the composition and uniformity of the preparation are adequately controlled. (*Jour. A. M. A.*, January 3, 1931, p. 39.)

THERAPEUTIC POTENTIALITIES OF "MUSTARD GAS."—From time to time hopes are still entertained for some possible usefulness in medicine of "mustard gas," chemically known as dichlorethylsulphide. British and German investigators report that the dermal application of dichlorethylsulphide will prevent the development of the experimental cancer of tars. Forster of the Pharmacologic Institute at Wurzberg has reported that dichlorethylsulphide in high dilution was the most efficient hair growth promoter of a considerable number of agents tried. Quantitative estimations of hair growth on shaved cats, treated locally with concentrations of 0.01 per cent of the compound in fifty per cent alcohol containing 2 per cent of glycerine, showed a much greater production of hair than with other substances used. Impure yellow petrolatum, but not the pure white product, was next in efficiency to dichlorethylsulphide, this being attributed to impurities acting as irritants. Forster found that when agents are used that cause excoriation a diminution or inhibition of hair growth occurs, and he suggests that this may also occur after injudicious application of dichlorethylsulphide. Lest the results of this research on hair tonics in felines arouse premature hopes in the bald and near bald, it should be mentioned that not all shaved and bald skins responded equally well. Nor are all "war gasses" necessarily effective, for the German cats, in Forster's hand, frankly declined to respond to the much vaunted "war gas" of the allies. (*Jour. A. M. A.*, January 3, 1931, p. 41.)

FIRST AID BY THE MANUFACTURER.—Doctors received during the Christmas season a copy of the pamphlet entitled, "First Aid and Emergencies," prepared by McKesson and Robbins for circulation to the public. It is not surprising to find from consultation of this pamphlet that first aid covers a wide variety of conditions and that apparently McKesson and Robbins have developed something for each of these conditions. Thus, anemia is listed among the conditions demanding first aid and the patient is given full instructions for its control. In addition,

biliousness and liver trouble, Bright's disease, diabetes, eczema, gout, rheumatism and tuberculosis are among the conditions demanding first aid. True, the book mentions in various places the desirability of calling a physician, but the patient is encouraged to take a chance. This pamphlet represents one of the worst phases of proprietary medicine business. (*Jour. A. M. A.*, January 3, 1931, p. 44.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the U. S. Department of Agriculture which enforces the Federal Food and Drug Act: Antikamnia and Codeine Tablets (Antikamnia Remedy Co.), each containing 2.88 grains of acetanilid with caffeine, sodium bicarbonate and a small amount of codeine. Ak-No-Mor (A. G. Luebert), capsules containing 3 grains acetphenetidin, some acetylsalicylic acid and caffeine. Sargon (Sargon Laboratories), an alcohol-water solution of sugar, glycerin, extract of ox gall, a bitter drug, small amount of an iron compound, sodium citrate and caffeine. Gauvin's Headache Wafers (J. A. E. Gauvin), containing acetanilid and sodium bicarbonate. Hygem (Vita-Bac Corporation, Bloomfield Laboratories), consisting essentially of an emulsion of mineral oil, a small amount of casein-like material and water, flavored with peppermint oil and containing no viable acidophilus bacilli. Now (R. D. Coulson), consisting essentially of small amounts of menthol, camphor, oil of eucalyptus, licorice, alcohol, glycerin and water. Acquin (Clausen-Zoller Co.), containing acetphenetidin, acetylsalicylic acid and starch. (*Jour. A. M. A.*, January 3, 1931, p. 57.)

THE "SMEATON WAY" EYE DROPS.—A relatively insignificant piece of medical swindling has recently been put a stop to by the postal authorities, through the issuance of a fraud order against Smeaton Way, Vincennes, Indiana. "Smeaton Way" was the name under which William D. H. Smeaton was selling through the mails a preparation called "Itsgone-Eyedrops" which he claimed was a cure for all known eye diseases and even blindness. The "eyedrops" were made out of honey, egg yolk, melted butter and water. (*Jour. A. M. A.*, January 3, 1931, p. 57.)

TREATMENT OF COUGH AFTER BRONCHITIS.—Children who cough should not be permitted to attend school. If the child has fever, it should be kept in bed. Warmth, as uniform as possible, is the prime requisite in the treatment of colds and acute coughs. The chief of all expectorants is water; without it most medicinal expectorants fail and, with an abundance of it, they may not be required. Nevertheless, they probably contribute, when wisely used, to a speedier evolution of the various stages of bronchitis and to a more rapid recovery. The salines, chief among them ammonioum chloride and sodium citrate, head the list of agents that may reasonably be expected to be of use in "loosening up" a cough, provided they are given freely, frequently and with plenty of fluid. Iodide, the most powerful of the saline expectorants, should not be employed until the acute stage is well over. When the cough is "loose," aromatics may be of value such as terpin hydrate and creosote. A cough that hangs on is not so much an indication for medicine as a challenge to determine why it does. (*Jour. A. M. A.*, January 3, 1931, p. 61.)

MYLIN NOT ACCEPTED FOR N. N. R.—The Council on Pharmacy and Chemistry reports that "Mylin" is the uninforming name under which the Mifflin Chemical Corporation markets capsules, each stated to contain: amidopyrine, 3½ grains; caffeine alkaloid, 1 grain; oleoresin ginger, ¼ grain; cornstarch, ¼ grain. The preparation is offered to the laity with the assurance that it is quite safe to take for the relief of pain which may be the warning signal for a serious condition. The Council found Mylin unacceptable for New and Nonofficial Remedies because it is an unscientific mixture of drugs marketed under an uninforming name and with unwarranted claims which will lead to its ill advised use by the public. (*Jour. A. M. A.*, January 10, 1931, p. 115.)

KOTEX.—Because of inquiries received in regard to the nature of the deodorant present in the widely advertised sanitary napkin, Kotex, the A. M. A. Chemical Laboratory examined the product. A specimen was labeled "Genuine Kotex Deodorized". An enclosed circular contained the statement: "Kotex is odor proof. A mild, pure, safe antiseptic removes any danger of offense during the use of Kotex." The Laboratory found the Kotex pads to contain an amount of boric acid which is too small to be considered of value as a deodorant. (*Jour. A. M. A.*, January 17, 1931, p. 193.)

RENTON'S HYDROCIN TABLETS.—Under the name "Renton's Rheumatic Tablets" the Renton Company of Pasadena, California, put out an alleged rheumatism cure a year or so ago, under the claim: "What insulin is doing for diabetes, Renton's Rheumatic Tablets are doing for arthritis, neuritis and rheumatism." After the preparation had been on the market for some time, the officials at Washington in charge of the enforcement of the Food and Drug Act are said to have made the Renton Company eliminate the word "Rheumatic" from their labels and the nostrum became "Renton's Hydrocin Tablets". The A. M. A. Chemical Laboratory reports that each Renton's Rheumatic Tablet was found to contain essentially 0.32 Gm (approximately 5 grains) of cinchophen, with a relatively small amount of an unidentified amine. The Laboratory reports that qualitative tests indicated Renton's Hydrocin Tablets to contain the same ingredients as found in Renton's Rheumatic Tablets, and that the amino compound present was identified as a tetraethyl ammonium compound. Although the tablets were stated to be enteric coated, the Laboratory found that the coating flaked off when they were immersed in .2 per cent hydrochloric acid. Summed up, it appears that people who pay $1.50 for fifty Renton's Hydrocin Tablets are getting what is essentially fifty five-grain cinchophen tablets, which could be purchased at almost any drug store at half the price, and, what is of more importance, with the possibility of the dangers and limitations of the drug known. With the increasing number of cases of acute yellow atrophy of the liver following the continued use of cinchophen it seems little less than criminal that irresponsible "patent medicine" exploiters should continue to put this potent drug into their secret mixtures, with no warning as to the possible dangers in its continued use. Nor are the large and supposedly respectable pharmaceutical houses, which put up such formulas for "patent medicine" manufacturers, free from moral responsibility. (*Jour. A. M. A.*, January 17, 1931, p. 209.)

MISLEADING METHYL CHLORIDE PUBLICITY.—The Committee on Poisonous Gases of the American Medical Association issued a report emphasizing the hazard arising from the use of methyl chloride in refrigerators. In the view of the committee it is more commendable to work toward the attainment of a nonhazardous refrigerant than toward the attainment of a usable warning agent. Nevertheless, chemical manufacturers apparently have been able to induce the Bureau of Mines to make studies of the properties of methyl chloride and methyl chloride to which has been added acrolein, an irritating warning agent. One of these concerns, the Roessler & Hasslacher Co., markets methyl chloride under the trade name of "Artic" and Methyl Chloride A, which is pure "Artic" plus 1 percent of acrolein. A report of the Bureau of Mines appeared which was written in such a way as to lend itself to use as advertising copy by writers seeking to create favorable propaganda for commercial exploitation of methyl chloride. The report emphasized that methyl chloride exerts no deleterious effects on the contents of the refrigerator and implied that it is therefore of no importance whether or not methyl chloride escapes into the refrigerator. The major point—the hazard of escaping methyl chloride to occupants near the source of the leak—is not stressed. The Roessler & Hasslacher Chemical Company has used the report to create the impression that "Artic" is a relatively harmless substance and the last word in efficient and safe refrigerants. It is unfortunate that a branch of the government, the

Bureau of Mines, has been swayed to serve more the interests of chemical manufacturers than to serve the interests of the public.—(*Jour. A. M. A.*, January 24, 1931, p. 272.)

THE HORMONE OF THE ADRENAL CORTEX.—The Swingle-Pfiffner cortical hormone "extract" has been tested in cases of Addison's disease at the Mayo Clinic. Hartman, Brownell & Hartman also have been able to prepare an extract of the adrenal cortex that will prolong the lives of adrenalectomized animals indefinitely. They also have revived a patient with Addison's disease having a systolic blood pressure of 50 mm. and a pulse of 120 a minute by the use of their preparation of the hormone, for which they propose the name Cortin. "Cortin" administered by mouth appears to give little or no benefit. It is best administered subcutaneously except in circulatory failure in which absorption is greatly reduced; then intravenous injection is employed. One may soon confidently expect the relief of the dire Addison's disease by the cortical hormone. (*Jour. A. M. A.*, January 24, 1931, p. 273.)

PROF. PAUL C. BRAGG.—Bragg's scheme is one that has become increasingly popular during the past few years with those who live by their wits. Ignoramuses or swindlers with a flair for public speaking, confer on themselves ornate titles, create paper organizations with high-sounding names, and give what are described as "free lectures," but which are, in fact, merely pieces of come-on advertising for books and nostrums they have for sale and especially for so-called classes, for which a round charge is made. Bragg, like most of the ilk, works particularly along two lines: Food fads and sex. As another of his activities, Bragg, unfortunately for himself, went into the mail-order business. So long as the general level of intelligence remains what it is, systems like Bragg's are likely to remain profitable and safe. Using the mails to defraud, however, is another problem, and here is where Bragg made a tactical error. The postal authorities called on "Prof." Paul C. Bragg and his National Diet and Health Association of America, and his Bragg Laboratories, to show cause why a fraud order should not be issued against them. In due time such an order was issued. (*Jour. A. M. A.*, January 24, 1931, p. 288.)

ANTITOXINS AGAINST SCARLET FEVER.—No "one-shot" method of active immunization against scarlet fever has proved effective. The present status of the "ricinoleated antigens" is that they are of unestablished value. Their therapeutic action has not been proved. Scarlet fever ricinoleated antigen has been distributed by only one concern and that concern has recently discontinued the manufacture and distribution of ricinoleated antigen and is recalling it from the market. (*Jour. A. M. A.*, January 24, 1931, p. 292.)

THYMOPHYSIN.—Thymophysin is a foreign proprietary preparation of posterior pituitary and thymus claimed to be an oxytocic to accelerate normal delivery. In German periodicals, many articles have appeared praising the virtues of this mixture for use in the first and second stages of labor. Even in America a number of favorable but uncritical articles have been published. Erwin E. Nelson, of the University of Michigan, has reviewed the literature and carried out experimental investigations. He points out that the literature reveals no controlled evidence that the oxytocic or pressor activities of pituitary is altered by the addition of thymus extract. From his experimental work it appeared that, in this country at least, Thymophysin is incorrectly labeled as to its strength and no difference could be ascertained in the oxytocic or pressor activity of pituitary extract as compared with pituitary plus thymus extract. Nelson believes that the clinical results obtained from Thymophysin can be explained completely as due to small doses of pituitary extract. Thymophysin illustrates again the pitfalls awaiting those who are not thoroughly competent to undertake clinical evaluations but who arrive at conclusions based on the use of material the composition and activity of which have not first been scientifically determined. If physicians wish to undertake experimental clinical investigations with drugs, they will save time and protect the interest of the patient by limiting themselves to drugs whose chemistry and pharmacology has first been studied by the Council on Pharmacy and Chemistry. (*Jour. A. M. A.*, January 31, 1931, p. 359.)

MISBRANDED OR ADULTERATED PHARMACEUTICALS.—During 1930 Notices of Judgment were issued by the Food, Drug and Insecticide Administration of the United States Department of Agriculture against the following pharmaceutical products that were found adulterated or misbranded: Aconite Tincture: shipped by the Blue Line Chemical Co. Bulgarian Bacillus: tablets consigned or shipped by Fairchild Bros. & Foster. Pure living cultures of Bulgarian bacillus: shipped by the H. K. Mulford Co. Chloroform: shipped from Philadelphia (name of the company not given). Ergot: fluid extract shipped by the Blue Line Chemical Co.; fluid extract shipped by John Wyeth & Brother, Inc. Ether: shipped by American Solvents and Chemical Corporation; shipped by the J. T. Baker Chemical Co.; consigned by the Bayway Terminal (for the Harold Surgical Corporation); consigned or shipped by the Mallinckrodt Chemical Works; shipped by the Ohio Chemical & Manufacturing Co. Magnesium Citrate; shipped by the Citro Nesia Co., Inc.; shipped by the Henry P. Gilpin Co. Nux Vomica: shipped by the Blue Line Chemical Co. Opium: tincture shipped by the Blue Line Chemical Co. Quinine Sulphate Tablets: shipped by the Blue Line Chemical Co. Sassafras: oil shipped by the North Carolina Evergreen Co. Sodium Bicarbonate: shipped by James G. Good, Inc. Strychnine Sulphate Tablets: shipped by the Blue Line Chemical Co. (*Jour. A. M. A.*, January 31, 1931, p. 375.)

INSUROL IN DIABETES.—"Insurol" is a nostrum sold on the mail-order plan by a concern or concerns known, variously, as the Officinal Products, Inc., and New Life Products Co. Insurol has been described as a "triumph of Germany's biochemical laboratories" and, it is said, "combines insulin with the actual substance of the pancreas gland." In diabetes quackery, two elements are nearly always found: The first is that of requiring the person who uses the nostrum to adopt a diet that is low in carbohydrates. The second, and more common, is that of incorporating in the nostrum a diuretic. The average diabetic patient has some rough-and-ready method of estimating the amount of sugar that is excreted. In a report regarding the assumed effects from Insurol, there are many factors that may explain the alleged reduction of sugar. (*Jour. A. M. A.*, January 31, 1931, p. 378.)

ABSTRACTS

STUDIES ON DIGITALIS IN AMBULATORY CARDIAC PATIENTS

Harry Gold and Arthur C. DeGraff, New York (*Journal A. M. A.*, Oct. 25, 1930), assert that in the average ambulatory cardiac patient with auricular fibrillation and moderate heart failure a much lower "effective concentration" of digitalis in the body suffice to produce full therapeutic effects than is required in the average bedridden patient in advanced congestive failure. The authors have shown that, in the ambulatory patient, full therapeutic effects, as judged by the usual clinical criteria of improvement, can be produced by the daily repetition of a relatively small dose of the drug that can then be continued as the daily maintenance dose without producing toxic symptoms. It is well known that such results cannot be obtained with such small doses in the average patient with far advanced congestive failure; the larger daily doses usually required in these cases cannot be long continued without producing toxic symptoms. In the average ambulatory cardiac patient there is a wide margin between the minimum dosage that produces full therapeutic results and the maximum that can be tolerated

without toxic symptoms. This margin is frequently smaller in patients with far advanced failure and the latter often require the largest dosage that can be tolerated in order to produce the best results. It is the accepted practice to use relatively larger doses of digitalis to produce the full therapeutic effects and then relatively smaller daily ones in order to maintain these results for long periods of time. The usual explanation is that the smaller doses are necessary in order to maintain the high "effective concentration" of the drug produced by the larger ones. Evidence has been set forth proving, however, that the "effective concentration" of the drug within the body necessary to maintain the full effects is usually much lower than that required to produce them in the beginning.

DISLOCATION OF THE SHOULDER

Clay Ray Murray, New York (*Journal A. M. A.*, Jan. 31, 1931), calls attention to the common faults in the care of the ordinary type of dislocation of the shoulder as observed in a fracture clinic, and the results as reflected in prolonged convalescence and even permanent disability.

FEEDING OF GASTRIC TISSUE IN TREATMENT OF PERNICIOUS ANEMIA

Sixty patients who have pernicious anemia have been treated by H. MILTON CONNER, Rochester, Minn. (*Journal A. M. A.*, February 14, 1931), with gastric tissue of swine or with tripe. Two of these were given gastric tissue of swine after virtual failure with tripe, and tripe constituted the sole form of gastric tissue given to two. Forty-six of the patients have been carefully studied under observation in a hospital. Raw and dried preparations have given approximately equivalent results. The mucosa, the remainder of the stomach after the mucosa was removed, and whole gastric wall were used separately, and each proved effective in the cases treated. The presence of muscle meat was not required to obtain results in the two cases treated with mucosa without muscular coat or other muscle meat. Fundus and pylorus, each used separately, produced satisfactory if not equal results. The effects on the reticulated erythrocytes, mature erythrocytes, hemoglobin and leukocytes are similar to and apparently equivalent to those obtained by feeding liver or liver extract. The effects on the general and neurologic symptoms are apparently about the same as those obtained with liver or its extract.

CHEST IN RACHITIC CHILDREN

On the basis of a study of seventy-eight cases of rickets in children, RALPH S. BROMER, Philadelphia (*Journal A. M. A.*, February 14, 1931), states that mild rachitic involvement of the chest is not dangerous to life and does not increase the hazard when pulmonary infections occur. None of the patients who had a mild or moderate rosary without apparent chest deformity died from the effect of the rachitic process. Many were examined for a suspected pneumonia, but the roentgen examination proved negative and they were subsequently discharged from the hospital with a diagnosis of acute bronchitis. The mortality rate in cases exhibiting a mild or moderate rosary with no deformity did not seem to be greater than the usual rate found in the average patients admitted to hospitals with pneumonia showing no rachitic involvement of the chest, many of whom often have had prolonged treatment at home until they have reached a grave stage of their illness. The rate rose proportionately with the increase in deformity and especially with the degree of pliability of the chest wall. A case that came to autopsy would seem to prove the statement that deformity and normal thoracic function are compatible, but the loss of rigidity of the chest will so seriously impair the normal function that any infection may prove fatal, however mild it may be. As healing progresses, the thorax regains its rigidity even though deformed and the death rate in this series was consequently much less in the children over 3 years of age. In fact, no patients died in the series when pneumonia occurred after healing was well advanced.

BRAIN ABSCESS AS OTOLOGIST'S PROBLEM

During a recent visit to some of the eastern hospitals, O. JASON DIXON, Kansas City, Mo. (Journal A. M. A., February 14, 1931), was struck by the indifferent attitude of the otologist to the patient with a brain abscess. Once the lesion was diagnosed, the patient was promptly transferred to the neurologic service, where he was not seen again by the otologist. He was shifted and transferred as much as possible from one service to the other because of the attitude expressed by the attending intern at one hospital in the words "I heartily approve of transferring these patients as all of our patients who develop brain abscess die anyhow." It is the fatalistic attitude toward this lesion which is so destructive to any progress in the proper management. One also frequently hears of the recurrence of this lesion and of the mental impairment which these patients afterward suffer. From experience with his own patients, and in reading of others, he is convinced that the patients who have completely recovered from a brain abscess suffer no more impairment after the operation or recurrence than patients who have had an appendectomy. One has only to see such skilful surgeons as Cushing and Dandy operating on the brain for the removal of tumors to realize how much may be done to this organ without disturbance of function. After all, it does not matter so much who performs the surgery on the brain abscess, as the fact that it must be recognized early enough to afford an opportunity for proper surgical procedure. Falling, as it does so frequently, within the field of the otologist, it behooves him to be familiar with the clinical course of this lesion and to realize how frequently brain abscess exists as a complication of ear infection.

INFECTIOUS RECURRENCE AND MUCOCUTANEOUS RELAPSE IN SYPHILIS

The study made by John H. Stokes, John H. Besancon and Arthur G. Schoch, Philadelphia (*Journal A. M. A.*, Jan. 31, 1931), covers 60 relapses, in 56 patients among 2,439 syphilis cases, of which 911 were in the primary or secondary stage. Reinfection has usurped the place of early relapse in syphilis in the interest of syphilologists during the past decade and in the literature, with the result that the comparatively much more important public health issue, that of infectious relapse in syphilis, has been submerged. Aside from the important possibilities of confusion between relapse and reinfection, which make differential diagnosis difficult, possible reinfection constitutes only 0.16 percent of the material of this study, while relapse is fourteen times as frequent (2.2 percent). Practical maxims for the physician who wishes to treat early syphilis so as to prevent infectious cutaneous and mucosal relapse with consequent dissemination of the disease from an uncontrolled and usually unrecognized source include the following: (*a*) The concept of abortive cure by short courses should be abandoned, no matter how early the patient may come under treatment. (*b*) No less than twenty injections of an arsphenamine, and more if possible, preferably in one or two courses, and an equivalent amount of heavy metal, without rest intervals, should be given, in an early case, to control infectiousness. (*c*) Cutaneous and mucosal relapse is detected by actual physical examination, with special emphasis on the mouth, anus and genitalia, rather than by the Wassermann test. One should examine especially the lips, penis, scrotum and vulva. (*d*) Positive serologic tests may warn of infectious relapse and confirm the diagnosis; but, since they cannot be applied frequently, physical examination and instruction of the patient in self-recognition of infectious lesions are the more important approaches.

(*e*) Negative serologic tests are not proof of noninfectiousness, immediate or future. A negative Wassermann or Kahn test should not deceive physician or patient into relaxing precautions. Treatment and time are the chief preventives of infectiousness. (*f*) Serologic tests and stripped physical examinations, to be of value in detecting relapse, should, if anything, be made more frequently after treatment is completed and the patient is put on observation, than during treatment itself. The opposite is common practice. This applies especially to the first two or three years of the disease. (*g*) Since potentially infectious relapse occurs overwhelmingly in the first two years of early syphilis, sexual relations and intimate contacts without absolute protection should be allowed only while the patient is under actual arsphenamine treatment. The duration of noninfectiousness when treatment is stopped before the twelfth injection of arsphenamine may not exceed one month.

DIAGNOSIS AND MANAGEMENT OF THE ALLERGIC CHILD

A child suffering from the so-called allergic syndromes of asthma, eczema, urticaria and hay-fever is viewed by Bret Ratner, New York (*Journal A. M. A.*, Feb. 21, 1931,) from the standpoint of protein hypersensitiveness. A carefully taken and thoroughly analyzed history is essential. This should include not only the history of a typical attack in its relation to foods, contact with animals, season of the year, time of occurrence and locality, but also a broad and general history of the case as a whole. In addition to the history, a complete physical examination and laboratory tests such as chemical examination of the blood, cytologic studies and roentgenograms should be made and from 300 to 400 protein skin tests performed on each child by the scratch method. The author believes that etiologic factors such as sensitization in utero, sensitization by passage of antigen through the intestinal tract, and sensitization through inhalation of antigenic dusts are of paramount importance. The management of the allergic child and a study of its progress under the careful regimen described presents evidence that specific protein hypersensitiveness is as basically important to allergy as the tubercle bacillus is to tuberculosis. He hesitates to extol the virtues of so complex and still immature a subject as allergy, but an analysis of cases studied over a period of years sanctions his form of management as a sound therapeutic procedure.

PRESENT CONSIDERATION AND CARE OF COLON

John A. Lichty, Clifton Springs, New York (*Journal A. M. A.*, Feb. 28, 1931), calls attention to those functional disturbances of the large bowel which are frequently the cause of considerable concern to the patient and annoyance to the attending physician. Among the functional disturbances of the bowels are certain irregularities due to an atonic condition at times or, again, to a spastic condition of the colon. With these disturbances of motility there are also secondary disturbances, and these together may gradually develop a mild irritative condition of the mucous membrane, with a production of stringy mucus, ordinarily called mucous colitis, and attributed to a neurogenic origin. There may gradually develop a more or less catarrhal condition with a production of flakes or clumps and strings of mucus containing innumerable leukocytes. Others of these functional disturbances are dilatation and sagging of certain portions of the colon, due either to congenital defects or to developmental changes. On account of the attempt at a compensatory restoration of function, extraperitoneal folds are formed. Also on account of continual traumatic insult there may develop weblike adhesions. With all these disturbances which may take place in or about the colon, the patient almost invariably develops a certain degree of invalidism characterized by psychic and neurotic symptoms. Other symptoms more constant and probably more significant are irregularity of the bowels, such as constipation and occasionally diarrhea, an accumulation of gas in the abdomen, producing an annoying borborygmus, irritation and soreness in the course of the colon, and an occasional pain and bearing down sensation, especially in the lower part of the abdomen. The pain may be very severe, especially before there is a stool, usually consisting mostly of mucus. The pain may occur suddenly and be cramplike in character, mimicking acute appendicitis, gallstone attacks, renal colic or duodenal ulcer. Before undertaking the treatment of these patients with chronic disturbance of the colon, one should obtain a certain concept of the state of the nervous system. This is accomplished largely through a painstaking, careful history. Also the disturbances of the secretory activities of the alimentary tract should be known. Such information as is obtained from gastric analysis, duodenal drainage and examinations of the stools is helpful. It is desirable to make all these studies in a definite and concise order before the treatment is planned. Uncertainty on the part of the physician will soon lead to an unfortunate psychologic reaction on the part of the patient. Every effort should be made to overcome anxiety and nervous strain. The diet should be nutritious so as to maintain a normal, or somewhat higher than normal, body weight for a time. The diet should not be bulky, coarse and irritative when the case is first undertaken. In the early stage of the treatment it is well to puree the vegetables and stew the fruits. Abundance of fat in the way of butter, cream and olive oil should be given. Irritating cathartics should be avoided; they are not necessary if fats and fluids are given in sufficient quantities. If medication is necessary, on account of constipation, it should be determined largely by the degree of spasticity of the bowels and the acid content of the gastric juice. Constipation with a spastic bowel and a high gastric acidity yields more readily to an alkaline laxative, such as magnesium oxide with the addition of belladonna or its derivatives, whereas the atonic bowel with low gastric acidity will yield more readily to bitter laxatives, such as the cascara preparations with the addition of nux vomica and its derivatives. As the symptoms of the irritable colon disappear the diet should be changed by allowing more roughage and a more even balance of carbo-hydrates and fats. This will usually control the irregularity of the bowels that gives such concern. Frequently patients with an irritable or a sluggish colon will resort to large and repeated enemas. The natural condition of the colon, however, is to be more or less full, and any attempt to keep it empty by strong laxatives or large enemas or flushings is based on a misconception of the function of the colon and will be likely to cause harm. The colon should have the same consideration and care in relation to disease as any of the other viscera and should not receive any more abuse than any other organ when there seems to be a dysfunction.

USE OF VITAMIN B IN DIETS OF INFANTS

Wheat germ and yeast in the form of dried powdered watery extracts when added in the proportions of 1 Gm. of wheat germ extract and 0.5 Gm. of yeast extract to 1 ounce of a preparation of maltose and dextrin and fed to infants by B. Raymond Hoobler, Detroit (*Journal A. M. A.*, Feb. 28, 1931), caused no appreciable gain in weight over controls who were fed on similar formulas without vitamin B additions. Infants given vitamin B additions showed a greater growth in recumbent and stem length than controls not given the vitamin B additions. About one out of six of the infants studied showed symptoms of rigidity. This symptom disappeared in all but six of the cases, indicating that the quantity of vitamin B needed by infants differs greatly, and that one should bear in mind that while the amount of vitamin B in the commercial carbohydrate preparations may be sufficient for certain infants, there are others who will require larger quantities.

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ORIGINAL ARTICLES

INFECTIONS OF THE KIDNEY AND THEIR MANAGEMENT*

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BOSTON, MASSACHUSETTS

The healthy kidney may, and often does, serve as a filter for various bacteria which enter it by way of the blood stream. That this phenomenon may occur clinically as well as experimentally has been shown by many observers. While this filtration of organisms may give rise to no demonstrable lesions, when their number is small, their virulence attenuated and the resistance of the kidney high, it is generally the case that damage of greater or less amount and of more or less permanence is produced.

The organisms most frequently met with in the kidney are the colon bacillus, the tubercle bacillus, and either the staphylococcus or the streptococcus. Among the other organisms entering the kidney are the typhoid bacillus, and with great rarity the gonococcus.

I believe it is pretty well accepted that tubercle bacilli and the cocci reach the kidney by way of the blood stream. It is doubtless true also that the colon bacillus enters the kidney by the same path, but I think it is also true that this organism may be carried either through the lymphatics of the ureter or of adjacent organs or even up the lumen of the ureter itself. A voluminous literature from both the clinic and the laboratory already exists and as many questions are still unsettled much more is likely to come from these sources in the future.

We as clinicians are interested, of course, in the answer to yet unsolved problems of etiology. But we are also primarily perhaps interested in the problems which are presented by the patient who harbors one or the other of these organisms in his kidney. I have already indicated that the entrance of bacteria into the kidney nearly always results in damage to that organ. Generally such an invasion makes itself clear from the outset. On the other hand, it is difficult to realize that any or all of these organisms may produce lesions which begin, continue for a long time, and (by either the removal of the kidney, or the death of the patient) end without once calling attention to the kidney itself.

Turning now to the more practical side of the question, I wish to discuss the various types of infections from the point of view of both the urologist and of those in more general practice. As a basis for this discussion I have taken from the records of the urological clinic at the Massachusetts General Hospital seventy-five cases of nephrectomy, comprising forty-six with infection by the colon bacillus, twenty-nine by the tubercle bacillus. I shall also base some of my remarks upon certain observations of facts derived from other cases occurring either in my hospital or private practice.

Because tuberculosis of the kidney stands in a class by itself, I shall consider it first. While the strange feature of this disease is that it may continue for years without symptoms referable to the affected kidney, or with symptoms so slight or so fleeting that they escape the memory of the patient or the observation of the physician, there are certain outstanding symptoms which are characteristic. In my experience, frequency and nocturia were the chief symptoms for which the patient sought relief. On further questioning, pain in the lumbar region of the side affected was beyond all other discomforts the chief. But bladder irritability is so common and characteristic a feature of these cases that I can do no better than quote Braasch. He says: "It will be a conservative attitude to regard all cases of persistent irritability of the bladder, with pyuria particularly in young adults, as due to renal tuberculosis."

Among the signs of this disease a palpable, obviously large kidney, pyuria (generally with miscroscopic blood), costo-vertebral tenderness, loss of weight, and hematuria (generally slight and intermittent) constitute the most prominent findings.

It has been believed that the urine of patients with renal tuberculosis is sterile to culture. Some years ago Dr. E. S. Welles, now of Saranac Lake, New York, and I investigated this point. We found that "while a negative smear or culture from the bladder in a case of cystitis and pyuria

*Read at a meeting of the Terre Haute Academy of Medicine, February 6, 1931.

points strongly to tuberculosis, a positive smear or culture from the bladder or even from the kidney urine does not exclude tuberculosis." These conclusions have since been confirmed by many other investigators, among them Wildbolz, Runeberg, Suter, Pousson and Rafin.

The so-called characteristic appearances of tuberculosis of the bladder consisting of light absorbing redness, edema of the ureter and its vicinity on the side involved, intolerance and small bladder capacity while common are all or mostly absent in a surprising number. One often finds an essentially normal bladder. The guinea-pig test so long and so often regarded as infallible is infallible in most cases, but again is often found to be negative when subsequent events prove that tuberculosis was present. While the failure of this test may be due to faulty technique, the trouble lies quite as much in the fact that the tubercle bacilli are momentarily absent or so few in number that they fail to register. I do not doubt that there are also other factors whose nature we do not know. Microscopic examination of the urine sediment if and when positive is a most satisfactory and accurate method of diagnosis. This, however, is subject to even greater error than the guinea pig test. For whereas the former has an error of less than one percent, the microscope fails to find bacilli in forty or more percent. But in this test more than elsewhere the human element enters strongly. I have had house officers sit up all night to be rewarded by the finding of a few tubercle bacilli at dawn; others have reported a negative search after an hour or two of hunting. To make this test really satisfactory one must have not only a patient and accurate observer, but also one who is a permanent fixture in the laboratory.

It may be well to remark at this point that not at all times does the finding of tubercle bacilli in the urine indicate a pathological condition of the kidney. So great an authority as Wildbolz states that there may be at times a tuberculous bacilluria. I am in accord with this view as I have had at least two cases where with frank tuberculosis of one kidney, tubercle bacilli were found in the urine of the opposite apparently sound kidney. Subsequent events showed in these cases that the observation was correct. It is not, however, a common occurrence. On the other hand, the surgeon must always suspect that his patient has bilateral involvement of the kidney, even though this examination has proved one to be apparently sound. Many other observers believe even that bilaterality occurs in the majority of cases. While I cannot take this view, I am convinced that the so-called sound kidney is really harboring an early and small focus of infection much more often than we suspect. How can one otherwise explain the cases undergoing nephrectomy who return within a few weeks or months after operation with definite signs of tuberculosis in the remaining kidney? It is only after many careful examinations of the supposedly sound kidney that one can be reasonably sure of its integrity. Why indeed should not the disease be bilateral in most cases? We all acknowledge that the bacilli reach the kidney through the circulation. As the blood stream laden with bacilli enters one kidney it likewise enters the other. Intrarenal conditions the nature of which we do not know may repel the infection on one side and not on the other, but it seems to me that the opportunity for infection is the same on both sides. Just as it is necessary to search repeatedly for tubercle bacilli on the sound side, so also may it be necessary to search for them in order to make a diagnosis of tuberculosis in the diseased kidney. Repeated guinea-pig and microscopic tests may be negative in spite of every care. I agree with the proposition that in these and many other cases pyelography may be the deciding factor. The findings of a deformed or dilated renal pelvis, together with other signs and symptoms of disease, may often determine the point at issue.

The immediate treatment of renal tuberculosis, if and when it is unilateral, is nephrectomy; the treatment after operation or in the event that it is bilateral is hygiene of the most intensive variety continued as long as possible. Up to recently it has been believed that a tuberculous lesion in the kidney progressed gradually to complete destruction of the organ. No such process of arrest or walling off as is seen in the lung was thought to be possible and no one has yet been able to produce a specimen from either the living patient or at autopsy to prove it. More recently, however, certain observers, notably Medlar and Thomas, have reopened the question by submitting certain pieces of evidence which seem to favor the possibility of spontaneous cure. Further proof must be furnished, however, before this view can be accepted.

That nephrectomy for tuberculosis is not in and of itself attended by a high mortality is shown by the experience of many surgeons. Wildbolz has recently reported a mortality of only 2.5 percent in 660 operations and in a series of 140 consecutive nephrectomies done by him, there was not a death. Among the twenty-nine cases referred to in this paper there was one death from lobar pneumonia, a mortality of 3.4 percent. Such low figures give one a false sense of optimism; it is when we look up the ultimate results of this disease that the real seriousness of its nature is revealed. I cite Wildbolz again not only because his investigation is recent but also because he deals with an unusually large series of cases. Of 341 patients forty percent had died in from ten to twenty years after nephrectomy. More than half died from tuberculosis of the remaining kidney or from pulmonary tuberculosis. The remainder succumbed to miliary tuberculosis. While I cannot at this time give definite figures on the results obtained by myself and my colleagues, I feel sure that they will correspond closely to those of Wildbolz. In other words, kidney tuberculosis is but one more manifestation of a generalized tubercu-

losis. As it is obvious that the primary source cannot be removed, it follows that this focus must be reckoned with eventually.

Before leaving the subject of renal tuberculosis it seems fitting to say a word about the cases of bilateral infection which, as I have already remarked, form a very large percentage of the cases. Generally speaking, nephrectomy is contradicted. The patient not only needs every bit of renal tissue with which to carry on, but also the removal of one kidney is not likely to relieve the distressing bladder symptoms which may be his chief complaint. When, however, as is occasionally the case, one kidney has been proved to be not only functionless but also the seat of pain, tenderness and toxemia, it may be removed with the prospect of giving the patient a chance of improving his general condition for a greater or less period of time.

In by far the majority of bilateral cases medical and hygienic treatment must be depended upon. This in conjunction with a cooperative patient will not infrequently prolong life in comparative comfort over a long period of time. One of my patients, a boy of seventeen, died recently of meningeal tuberculosis five years after the diagnosis was made. During this time he gained steadily in weight, his appearance was healthy and beyond a very moderate irritability of his bladder he had no discomforts. He as well as most of my other cases, whether operated upon or not, was given tuberculin regularly over a long period of time. My experience with tuberculin both in renal and genital tuberculosis has extended over a period of years and has convinced me that it is one of the most valuable agents which we possess.

The tendency for tuberculosis to form sinuses is no less apparent after nephrectomy than at other times. In the twenty-nine cases reviewed here a sinus persisted in thirteen cases (forty-five percent) at the time of leaving the hospital. It is fair to say, however, that post-nephrectomy sinuses of any considerable duration are of rare occurrence. I do not recall more than two or three which persisted for more than a few weeks or months. It is in such cases that sunlight, preferably actual, but lacking this, the artificial variety, together with tuberculin will bring about amazing results. This plus the intensive hygiene already referred to will result in a closure of the sinuses in a comparatively short time.

Infection of the kidney by the pus-producing cocci presents a very different picture from that already described. Here we may see a presumably healthy male or female, adult or child, seized suddenly with intense pain and tenderness in the region of one or the other kidney. Profound prostration, sometimes with delirium, marked pyrexia of the so-called "picket-fence" type and high white count are evidence of the severity of the infection. The kidney may or may not be enlarged but it is extremely tender, especially in the costo-vertebral angle. These phenomena together with the entire absence of bladder symptoms and a urine that is often persistently normal, are quite characteristic of infection of the kidney by the staphylococcus, the so-called "acute hematogenous kidney." But even this picture has its variations. I have seen little or no constitutional disturbance and but slight pyrexia and leucocytosis; it is also true that pronounced bladder disturbance does sometimes occur and that the urine may contain considerable pus, some blood and what is most important, staphylococci in greater or less number. In not a few instances the differential diagnosis between such an infection of the kidney and an acute intra-abdominal condition may sorely tax one's diagnostic acumen, the perplexity being augmented by the negative urinary signs and symptoms. More than once I have seen a high retrocæcal appendix give rise to the very symptoms which I have described; quite as often I have seen symptoms produced by such a kidney mistaken for those of an acute appendix.

If and when one is sure that he is dealing with an acutely infected kidney the question of treatment immediately presents another stumbling block. In the first place I am certain that such infections in mild form are far more common than is generally supposed. Some or all of the symptoms which I have described may be present in greater or less intensity; they may subside in a short time, even before a definite diagnosis can be made and may be recorded as renal colic, cholelithiasis, appendicitis, gastric ulcer or a variety of other lesions. On several occasions when operating upon a kidney for an entirely different condition, I have seen what I believe to be unmistakable evidence of previous infection of this nature in the form of dense adhesions overlying the dimpled scars of healed cortical abscesses.

In the event of a well-marked case of coccus infection of the kidney, and the vast majority are of this type, immediate operation may seem at first sight to be indicated strongly. In the past this was certainly true, but as time has gone on it has been found that "watchful waiting" when carried out by an experienced observer is often the safer policy. One is always astounded at the marvelous resistance to infection exhibited by certain individuals. While the exercise of those faculties which constitute what is called "surgical judgment" is essential the surgeon must also be guided by the four-hourly chart, the daily or twice daily white count, the degree of tenderness, spasm and pain and the appearance of the patient.

So long, and only so long as these signs remain stationary or make no untoward changes, one can afford to wait in the expectation that the cohorts of nature will come to the rescue. The pursuit of such a policy may tax one's skill and courage far more in my opinion than does the use of the knife. During this period every means at one's command must be employed to combat sepsis and to rally the patient's resources. I regard hypodermic or intravenous administration of warm normal saline

solution, once or twice a day in amounts from 1000 to 1500 c.c., as one of the most valuable adjuncts in the treatment of these cases. It not only dilutes toxins, but also hastens their elimination through the kidneys and skin. Combined with this there should be free catharsis and a generous nourishing liquid diet to which small amounts of alcohol in the form of sherry or whiskey may be added. Pain should be controlled by ice bags locally applied and by sufficient morphine.

Under this treatment I have seen cases that at first seemed desperate make a complete recovery. One patient, a robust man of thirty-five, had a temperature of 104, repeated chills, leucocytosis of 28000, marked tenderness, pain and spasm and an apparently enlarged kidney. These symptoms continued for several days and certainly could be regarded as indications for operation. Finally, however, the tide turned, the infection subsided, the patient made a most satisfactory convalescence and has been well ever since. Other similar cases ending as happily have also been seen.

There are, however, other cases in which it is obvious that nothing short of operative interference will suffice. Here again the decision as to just how much and how little to do is often difficult. In some instances the simple drainage of a perinephritic abscess, leaving undisturbed a kidney which is neither seen nor felt, owing to the density of its adhesions, will be sufficient. In other cases one will come down upon a large, soft kidney, riddled with abscesses where immediate nephrectomy is an obvious necessity. In quite a number of cases, however, one finds a somewhat enlarged, tense, deeply engorged kidney with a thickened capsule. Through this capsule one can detect the protrusion of cortical abscesses, varying in size from that of a pin to that of a walnut and from one to literally hundreds in number. In this event complete decapsulation of the kidney is essential and, depending upon circumstances, may often suffice. Innumerable pinhead-sized abscesses had best be left untouched as they apparently will take care of themselves by natural processes. Larger abscesses can be drained by simple incision. These measures generally will suffice to turn the scales in situations which I have outlined. It may, however, be apparent that while decapsulation with or without the drainage of abscesses has tided the patient over a critical situation, the septic process is still active and further steps must be taken. In this event it may be necessary to operate a second time, doing a nephrectomy, in the hope that recovery may be assured. As even one operation in a thoroughly septic patient is a matter of extreme gravity it is obvious that care should be taken to obviate the remotest possibility of a second operation. In some cases the immediate removal of a doubtful kidney may be the wisest course.

My reasons for adopting a conservative attitude in the handling of some of these cases are two. In the first place, it has been my experience that most cases will recover without operation if constantly and carefully watched and in the second place over twelve percent of them eventually acquired an infection of the opposite kidney. If, therefore, one starts out at once by doing a nephrectomy on the side first infected, he may be brought to the necessity of having to operate upon the opposite side, a situation which would obviously be futile. In 121 cases of this type, treated at the Massachusetts General Hospital, only ten nephrectomies were done.

Coccal infections of the kidney being confined practically entirely to the cortical portion of the organ, communicate seldom or never with the collecting tubules or pelvis. This explains the essentially normal urinary findings and lack of bladder symptoms. It is also probably true that because of this the usual urinary antiseptics, such as hexamethylenamin, are of no demonstrable value in this type of infection, whereas, as will be shown later, they are often valuable in colon bacillus infection.

As it is well known that infections of the kidney with the staphylococcus or streptococcus originate from a focus elsewhere in the body, it is important, not only to locate, but to eliminate this focus. Experience has shown that infections of the teeth in the form of apical abscesses are perhaps the most fruitful source of infection, but the tonsils and sinuses of the skull are almost equally important. In the male, prostatitis and vesiculitis must not be overlooked. A good deal of emphasis has been laid upon furuncles and carbuncles as a source of danger. While I have seen both in hospital and private practice, a few instances of kidney infection from these foci, I believe them to be less frequent than is generally supposed. In an investigation of this point I have looked up the records of over 200 cases of carbuncle at the Massachusetts General Hospital and found evidence of kidney complications in not a single case. It is to be inferred from this either that these lesions do not often give rise to renal sepsis, or that such an infection comes after recovery from the carbuncle.

Finally, another matter of difficult decision is the question as to what to do about the focus which produced the kidney infection. The obvious activity of this focus and the serious constitutional and local disturbances produced by it make immediate interference unwise. Only after the entire process has quieted down and only when the patient has regained his strength and established some sort of immunity should one attempt to remove the tonsils or to drain alveolar abscesses or infected sinuses. At the same time it is obvious that in certain instances little or no progress toward recovery can be made until the source of bacterial supply is done away with. In other words, the management of a case of renal infection of coccal origin calls for the best skill and judgment of which one is capable.

By far the most common infection of the kidney is that produced by the colon bacillus. It is found

in infants, in the aged and in both sexes. While in many instances the colon bacillus is found alone, in culture or in smear, the recent light shed upon the question by various observers leads us to believe that staphylococci and especially streptococci may either have been the first organism to gain entrance to the kidney, inviting a secondary infection by the colon bacillus, or that these organisms may appear during a simple and quiescent colon bacillus infection. The advent of these cocci may, I believe, be responsible for the sudden onset of acute symptoms which occur in a chronically infected but dormant kidney. Bumpus and Meisser remark on this point that "in most cases of pyelonephritis a gram-negative motile bacillus, believed to be the colon bacillus, is generally the predominating organism in the urine. Therefore, investigation and treatment in the past have been directed against this organism. While foci of infection about the teeth and tonsils have been regarded with suspicion as causative factors, the rarity with which colon bacilli were isolated from them made their etiological role difficult to explain. The frequent association and simultaneous onset of oral sepsis and pyelonephritis led to the experimental work reported." Having established a relationship experimentally between infected tonsils and teeth, they found a similar chain of circumstances in the clinic. They then go on to say, "Following the extraction of the teeth or the removal of the tonsils in the ..... reported cases there was in every instance marked exacerbation of the patient's urinary symptoms associated with a serious febrile reaction. During the reaction a green-producing streptococcus was recovered, with the colon bacillus, in the urine which had formerly contained only the colon bacillus."

In conclusion it was observed "that the colon bacillus, which is commonly found and generally believed to be the cause of the infection, is of secondary importance."

In the view of this evidence it is clear that the most careful scrutiny must be given every case with colon bacillus infection and the presence of cocci suspected if not actually established.

I agree with Mathe′ that "repeated stained smears of the urine should be made carefully in order to ascertain the specific organism causing infection. Too much reliance should not be placed on the urine culture as the colon bacillus will often outgrow, crowd out and over-shadow the staphylococcus, streptococcus and other organisms."

While it seems to be clear that tubercle bacilli and cocci are carried to the kidney largely if not entirely by the blood stream, it is difficult and even impossible to say how the colon bacillus makes its way to the kidney. Undoubtedly it arrives by way of the circulation in many cases, but, unlike the tubercle bacillus and the cocci, it has a tendency to use lymphatic channels and also it may be carried up the ureter from the bladder either by a process of regurgitation or by a reversal of normal peristalsis.

While colon bacillus infection of the kidney may be of a simple nature and confine itself wholly to the pelvic mucosa, experience shows that this is not likely to be the case. On the contrary, "the organisms pass * * * into the capsule of the glomerulus, are carried by the urine into the straight collecting tubules of the pyramidal zone where they group together, become arrested, continue to grow, setting up infection which extends to the minor and major calices" (Mathe′). Thus we find ourselves dealing not with pyelitis as such, but with pyelonephritis, a condition far more difficult to eradicate. While this may at times clear up spontaneously or with simple palliative treatment, it is much more likely to resist all efforts to relieve it; ultimately it may progress to the stage of pyonephrosis, resulting in complete destruction of the kidney.

In view of all this, it is clear that the most careful scrutiny must be given every case with colon bacillus infection. In addition to discovering the possible focus of infection it becomes quite as necessary to determine the status of each kidney as regards its blood supply and drainage. In the event of any interference with these factors, as for instance by congenital abnormalities, kinks of the ureter, sagging of the kidney, aberrant blood vessels, calculi, or pressure from without as in pregnancy, the soil becomes fertile for bacterial growth. Those of us who are doing this kind of investigation are constantly encountering the most extraordinary and hitherto unsuspected pathological or congenital conditions of the kidney where for a long time the case has been regarded as one of simple pyelitis.

It follows that where one can demonstrate any of the conditions enumerated above or other causes or excitants of infection, it should be treated by appropriate surgical procedures, including nephrectomy where it can be shown that owing to the complete destruction of the kidney it is not only of no functional value but also is actually a source of danger to the patient.

Very common indeed are those cases of presumably simple colon bacillus infection of unexplainable origin occurring on the one hand in children (especially in little girls) and on the other in adult females. Having excluded septic foci elsewhere and having shown that there are no demonstrable conditions within or outside of the kidney which might mechanically interfere with its normal activity, it becomes necessary to treat the condition as an entity in itself. This procedure may be necessary for a long period of time or the condition may clear up after one or two treatments.

Unlike the lesions produced by tubercle bacilli and by cocci those caused by the colon bacillus often lend themselves to medication given by mouth and applied locally. Drugs containing formalin and some of the aniline dyes seem to be at times of value in checking if not in actually eliminating these infections. If and when it has

been decided that no surgical measures are indicated for the relief of the condition, drainage of the renal pelvis, continuous or intermittent, is found to be of great value. Constant drainage of two or three days' duration, this to be repeated if indicated, by means of one large or two smaller ureteral catheters, often is of the utmost value. This may be done safely even with an acute infection. Lavage of the renal pelvis through these catheters with silver nitrate up to five percent strength, or mercurochrome or some of the newer penetrating dyes is an essential. Sometimes this treatment will result brilliantly in a short time; on the other hand the infection may fail to yield to any great extent and may have to be kept up indefinitely.

If and when nephrectomy must be done we can at least encourage the patient by giving a good prognosis both immediate and remote. In going over forty-six recent cases in my clinic at the hospital there was only one death (2.17 percent). This was from pulmonary embolus on the ninth day. Although low, the mortality is much higher than is the case in larger series of cases. It is interesting to find that in twenty of these cases the exciting cause of infection was calculus, eighteen times in the kidney and twice in the ureter.

Before leaving the subject of nephrectomy, I want to touch briefly on the tremendous importance of a nephrostomy, preliminary to nephrectomy in some of these cases. In the more virulent infections, with the kidney forming, practically speaking, a huge abscess nephrectomy as the first and only procedure would be fatal. Under simple regional anesthesia with novocain the kidney can be exposed through a small incision and drained by a large rubber tube or self-retaining catheter passed through the cortex into the pelvis. It is amazing to see the rapidity of improvement in a patient who at the outset was profoundly septic. At the end of ten days to two weeks nephrectomy can be undertaken with every expectation of a happy outcome.

While I realize that each of these three types of infection is a large enough subject to occupy the length of a paper, even of a book, I have endeavored to bring out certain salient features. In closing my remarks let me summarize a little. The kidney which is absolutely normal seems to be able to filter bacteria of various kinds without injury to itself. Under certain unfavorable conditions these organisms produce pathological changes varying in severity from a mild and almost symptomless pyelitis to the most vicious type of destructive lesion. Each organism produces its characteristic changes. Those seen in tuberculosis affect any or all portions of the kidney, proceed more or less rapidly to complete destruction of the organ, are coexistent with other tuberculous lesions and are relieved only by nephrectomy. Surgery is always indicated but never urgent. The ultimate outlook for these patients is bad for the reason that they are still tuberculous. Those due to coccal infection affect the cortex and perirenal tissues, often accompany septic foci elsewhere, produce marked local and general symptoms and may demand immediate and radical surgical measures. In these cases, provided they overcome their sepsis, with or without operation, the prognosis is excellent. Colon bacillus infections are by far the most common, are often found to mask an underlying coccal infection, but are often apparently an entity in themselves. Abnormal conditions in or around the kidney, especially those interfering with the drainage of that organ, are frequently demonstrable. Surgery is often necessary for the relief of these conditions. Where no such abnormalities are demonstrable internal medication combined with renal lavage is indicated and is generally sufficient. Here the prognosis for life is good. If nephrectomy is not necessary, however, the condition may result in more or less invalidism.

In all of these infections the most careful and thorough examination may be necessary to discover the focus from which they arise.

Finally I wish to emphasize the fact that while kidney tissue is of the utmost value and should be conserved whenever possible, one is always faced with the problem of deciding whether and when it is better for the patient to keep a badly infected kidney of doubtful value with the probability of further operation being necessary or whether he should avoid this danger by a primary nephrectomy. I feel very strongly, however, that in children every effort at conservatism should be displayed. The power of recuperation and adjustment to handicaps evinced by the various organs, especially the kidney, justifies this stand.

MOUTH CONDITIONS CAUSING OCULAR INFECTIONS*

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TERRE HAUTE

We have known for many years that septic conditions have caused metastatic similarities in the eyes. About fourteen years ago Billings really brought the actual condition to light, that the more remote, less easily discoverable, focal infections were to be considered as etiological factors in eye diseases. Since that time great progress has been made in sorting out the locations of focal infections and in ascertaining just which eye conditions are to be expected if these focal infections do exist.

Most of us examine our patients with pathologic eyes routinely for possibilities of infection in the teeth, tonsils and accessory sinuses. If we fail to find the focus of infection in these more tangible locations we resort to the gall bladder, appendix, prostate and cervix of the uterus.

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It has been our experience, as well as that of others, as stated in the literature, that teeth and their adjacent structures have been the principal sources of infection in eye conditions. We have become so accustomed to find tooth trouble associated with eye conditions that we look into the general tooth situation as a second step after examining the offending eye. No doubt tonsils too play a very prominent part, if not as a primary source of infection at least as an adjunct which has been instrumental in causing the teeth to deteriorate. We do not condemn tonsils, although they may be very bad, until teeth have been absolutely ruled out of the picture in eye cases.

As for the remainder of the common sites for focal infection, they vary as to importance. We have not found many gall bladders, appendices and cervices causing trouble although we do not disregard them. Prostates, we think, are more likely to be dangerous, but even they do not rank with teeth and tonsils; especially with teeth, many more posibilities for infection are at hand, but we have had very few good results from removing these less prominent possibilities.

Often, in making these examinations for septic foci, we are confronted with many different possibilities, all of which are bad and we are nonplussed as to which particular focus is the most likely to be causing the trouble. As mentioned earlier in the paper, if teeth are in the list, they receive first attention. If, along with the bad teeth, we find tonsils foul and one or both maxillary antra black on transillumination, we still feel that teeth must be removed first. Possibly at the same time that the teeth are being eliminated it may be deemed advisable to open the antra and afford drainage there. I think as much should be done at once as is advisable for the welfare of the patient and the remaining foci cleared as soon as possible.

In speaking of mouth conditions I refer chiefly to those relating to gums and adjacent structures, such as (1) apical abscesses, (2) pyorrhea alveolaris, (3) septic broken roots, (4) maxillary or mandibular infection remaining after the extraction of the diseased teeth, (5) impacted, infected teeth, (6) pulp stones, and (7) degenerating pulp of an anamolous extra root from a nutritive disturbance following traumatism. This classification was suggested by Wilmer[1] and to it I will add unerupted teeth.

I believe that most pathological eyes are caused by apical or periapical abscesses. Old roots which have caused no apparent trouble in the years they have been detached from the tooth proper, with abscessed areas surrounding them, act in about the same manner. The other conditions in Wilmer's classification are much less frequent in focal activity and therefore less considered.

Opinions differ as to which eye conditions are in the list that are caused by septic foci and it is our privilege to add to or deduct from MacCallan's[2] classification.

"Ocular diseases that may be cured or improved by the elimination of a focus of sepsis are: increased lachrymation, blepharitis, tarsal cysts, chronic conjunctivitis, phlyctenular conjunctivitis, episcleritis, corneal ulcer, dendritic ulcer of the cornea, dacryocystitis, iritis and cyclitis."

We probably do not all agree with MacCallan's classification. At any rate we may be fairly positive that iritis, uveitis, cyclitis, episcleritis and corneal ulcer should be considered. MacCallan states further that "Cataract or any opacity of the crystalline lens is not affected by tooth sepsis." He, however, says that some ocular conditions are associated with focal sepsis, as:

1. Changes in the vitreous.
2. Hyperemia of the macula.
3. Pigmentary changes and definite degeneration of the retina at the macula.
4. Choroiditis.
5. Progressive myopia.

So many others have been mentioned by authors that it seems that all eye conditions can come from bad teeth. If we include blepharospasm, squint, ptosis and mydriasis, as have been mentioned, we are giving opportunity for ample discussion.

On discussing impaired vision up to complete blindness resulting from a reflex neurosis, MacKenzie[3] said that, "When diseased teeth give rise to ocular lesions the neural energy dispersed in the cerebral direction selects the eye because of its refinement and the delicacy of its structure."

We may classify the eye conditions due to teeth as reflex neurosis and inflammatory or degenerative changes in various structures of the eye.

In the first group it has been stated the disturbance is due to irritation of the dental branches of the trigeminus, without visible changes in the fundus but with impaired vision. The degenerative or inflammatory changes have been explained by many different theories. I think it is quite probable that the condition that exists is sufficiently selective to attack the eyes and no other organs. Again, it might be possible that the eyes are more susceptible to the particular type of onslaught and consequently victims of the invasion.

Again quoting MacCallan, "The exciting agent of ocular changes must be living or dead bacteria, the toxic products of bacteria, or the disintegration products that result from the action of bacteria on the body cells. In extra ocular inflammations of the conjunctiva and eyelids it may be occasionally a bacterial infection which spreads by contiguity of tissue or by way of the nose and lachrymal passages. Bacteria may spread from the primary focus by the blood stream in ocular conditions. However, in most extra-ocular changes, the toxic products are probably the exciting agents. Their path to the eye must be by the general blood stream after being absorbed by the lymphatics."

Wilmer's idea is that "the great preponderance of lesions of the very vascular uveal tract resulting

from dental sepsis suggests the blood stream as a definite transmission of infection to the eye. The ocular condition caused by dental sepsis may be the result of a slow and general sensitization of the delicate eye tissues to the diluted or non-virulent bacteria or their toxic substances, rather than a sudden overwhelming infection. In case of a violent inflammation of the eye, following the extraction of several badly diseased teeth, the lesion seems to come from a sudden liberation of bacteria or a large amount of toxic substance into the blood stream."

Benedict recognized the following methods of transfer to the eye: (1) directly through the bone, the tooth socket becoming the seat of an infection that destroys the bone of the upper jaw, through that directly affecting the orbital walls, finally producing cellulitis or retro-bulbar neuritis, (2) direct extension of the process along the periosteum to the malar bone, invading the orbit and giving rise to the same processes, (3) transfer of organisms from the focus at the tooth to the eye by the blood stream."

Numerous experiments have been made regarding the transplanting of organisms from cultures of teeth into guinea pigs, with consequent eye infections. While it does not always follow that an eye infection will ensue, many guinea pigs develop eye conditions after inoculation.

Streptococci have been found most frequently in cultures made from teeth and generally as the non-hemolytic variety. The hemolytic type is seldom encountered. Other bacteria which occasionally are present are pneumococci, staphylococci and micrococcus catarrhalis.

Tooth examination for focal infection, I think, is worthless when made only by the regular dental examination. It can only be of service when roentgenograms have been made by competent x-ray men and the interpretation of the films made by them, whether they be dental or general roentgenologists.

When this paper was planned originally it was intended to discuss overlooked mouth conditions. In Wilmer's classification of mouth conditions he suggests "maxillary or mandibular infection remaining after the extraction of diseased teeth" or socket infection. Naturally a patient who has had all his teeth removed for several years previous to our examination, with a history of having had no illness nor local irritation in his mouth, hesitates to be convinced that his edentulous mouth might be causing his eye condition. While these cases are not frequent, we do find individuals in whom all other methods of examination fail to show foci of infection and who are edentulous. We must not overlook the possibility of infection in these edentulous mouths. Probably due to the better education of the public in the tooth sepsis theory, it seems that it is easier to convince them now that foci of infection might exist in their gums and that they need roentgen examination than it was a few years ago.

I am presenting three case reports which I believe will demonstrate my point.

Case I—L. D. H., male, age sixty-four. Smallpox four months before examination. Quarantined for four weeks and while confined had pain in his left eye. The eye became worse and a diagnosis was made of corneal ulcer. Was given the usual treatment for corneal ulcer, but made no improvement. He had been advised that the ulcer was of the type that follows smallpox and that he might expect a long period of pain. Upon examination August 6, 1930, the left eye showed the lids negative, conjunctiva, both palpebral and bulbar, markedly congested with severe ciliary injection, nothing expressed from the lachrymal sacs. There was an ulcer on the lower portion of the cornea about three millimeters wide by four millimeters long. The iris was discolored and some small brown deposits were seen on the posterior surface of the cornea with the slit lamp. Pupil dilated by mydriatic which he had been using. Nose and accessory sinuses negative. Tonsils were small and nothing could be expressed. All his teeth had been removed. History of having had his gums x-rayed and a report given that a root remained. An attempt had been made to remove the root but no root was found. Wassermann and Kahn tests were negative. Urinalysis showed an occasional cast. Our urologist stated that the prostate showed no infection. While we were awaiting a report from the Wassermann and Kahn tests we prescribed a mydriatic and the usual antiseptic treatment.

Two days later the ulcer was unchanged and the pain very severe. On that date we advised another roentgenogram of the gums. The report was three unextracted roots, which were not where the one had been suspected, and six infected sockets. On that same day these sockets were opened and the contents removed. On the fourth day after the roentgenogram was made, the patient had no pain. The ulcer rapidly disappeared and the patient was discharged as cured on August 25, 1930.

Case II—B. W., male, age sixty-three. First seen on July 23, 1929. Patient at that time gave a history of having had a painful right eye for three weeks. The eye had first become inflamed and then cleared in a few days, but immediately became sore again. Patient complained on examination of severe pain with marked photophobia. Health good. Eye inflamed, severe ciliary injection, pterygium on each eye, an infected corneal ulcer about two by three millimeters in size near the margin of the cornea. Nose, throat and accessory sinuses showed no pathology. Edentulous. Urinalysis negative. General physical examination, including Wassermann, Kahn and prostate, negative. On July 25th the ulcer was cauterized with the actual cautery. On July 27, 1929, gums were x-rayed. Report showed three infected sockets, right upper. The dentist reported that he removed a large amount of pus from the sockets.

On August 9, 1929, the patient was discharged with the eye clear. On June 16, 1930, this patient returned with an ulcer on the same eye in about the same location. On that date a small amount of thin pus could be expressed from the right tonsil. Physical findings were otherwise negative and we rerayed the gums. Report of x-ray showed two infected sockets above and two below, not in the same location as the former. They were opened and evacuated. Patient was discharged on July 10th with no symptoms.

Case III—Mrs. J. H., age fifty-seven. History of left eye having been inflamed for three days. The cornea of the left showed a slight cloud with deposits on its posterior surface seen with the slit lamp. Pupil fixed with a discolored iris. Urinalysis showed pus one plus, albumen one plus. Wassermann and Kahn negative. Gynecological examination showed some laceration of cervix with slight erosion, small amount of leukorrheal discharge. The uterus and adnexa were negative. We were advised by the gynecologist that there was not sufficient infection to account for the eye condition. Blood pressure 150/90. Nose, throat and sinuses negative. Teeth all removed. X-ray of gums showed one infected socket which was opened and curetted. Patient recovered immediately.

Summary and Conclusions:

1. The infections of the eye which are caused by mouth conditions are varied but are not definitely determined by the profession.
2. Mouth conditions causing eye infections may look trivial but still be responsible for severe infections.
3. The general consensus of opinion is that the infection is transmitted through the blood stream, and assisted by the lymphatics.
4. The diagnoses of mouth conditions that are nearest correct are those made by roentgenograms.
5. In the edentulous we must not overlook the possibility of infection existing in the apparently innocent gums.

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Discussion

Glenn J. Pell, M.D. (Indianapolis): I appreciate the honor of being asked to discuss this paper. I think I might add a few points on the dental view of certain mouth conditions that may be of some help.

The essayist rates dental pathology in mouth conditions as possibly first in the causes of chronic eye disease. That gives us food for thought because patients are not prone to lose their teeth, and that does not make any difference to you as eye men. It may account for some of the lack of cooperation with the dental profession in not removing certain teeth unless they are perfectly satisfied that other foci in the body have been examined carefully. He says the first thing to do, after routine examination, is to take out the teeth. If a patient has one central incisor in the mouth, even if undisputable pathology is shown by x-ray findings, he is loath to give it up, and if that patient has a bad sinus, or other possible foci, perhaps it would be well to look after that first instead of attacking the teeth as the source of all focal conditions. So there is just a little different attitude on the part of the dentist and the patient. The patient will not give up some of these teeth until forced to do so.

Another thought occurs. We must take into consideration that in the vast majority of septic mouths eye conditions do not result as a consequence of the mouth infection. In other words, the probable number of eye conditions traceable to dental foci are in the vast minority. So we have to go a little bit slow in condemning the teeth.

The Doctor covered practically all of the mouth conditions, but I would like to review them. Examination of the mouth—good x-ray pictures, intelligently interpreted, a clinical study of the mouth, coupled with vitality tests, should go hand in hand. But there are many things that are overlooked easily and passed by as being of no consequence, and not even seen as a possible contributor. The interpretation of dental films, now that almost every dentist and a number of doctors have x-ray machines, is a source of embarrassment in our office almost every day. Patients come in with certain interpretations, and we do not see them, and we do not know what to say in order to protect the other man and to protect the patient. It is possible that we too are overlooking certain pathologic conditions about the mouth or teeth that could be interpreted.

The soft tissues of the mouth to my mind produce more infection than apical abscesses. Rosenow's work on mouth conditions has taken us to a point where we have concentrated our attention upon apical abscesses and their dissemination through the circulatory fluids of the body, and have overlooked all the vast pathology that exists in the mucous membranes, gum tissues and interproximal spaces about the teeth. We have practically the same organisms, under different conditions, as in apical abscess. Pyorrhea and gingivitis produce bacteria in the mouth which are disseminated rapidly. When there is apical abscess, especially encapsulated, the escape is slow, though sure, but they really are not the greatest disseminators of streptococci in dental conditions. It is in the acute exacerbations, where there is no walling off or a protected zone, that we see many eye conditions come about rather rapidly. They are probably the first class of offenders.

When we get into granulomatous tissues of course the teeth should be removed. I would class the gum infections as disseminating more toxins and poisons and bacteria into the bloodstream than apical abscess, because of the vast amount of tissue covered by gum abscesses. In other words, ten

times as great, or twenty times as great, in certain mouths, and with many more chances of dissemination.

The essayist mentioned roots and decaying root fragments in the edentulous patient. We consider now that root fragments remaining are infected and should be removed. As to infected sockets, radiographically, or through x-ray plates, the hardest thing we have to do is to judge bone density after recent extraction of teeth. The picture presented is one of rarefaction, but of course the infective agent is not the rarefaction. Rarefaction we know to be due, anatomically, to the root socket, or a cavity in the bone. With the gum tissue appearing normal, and allowing a certain length of time for regeneration, it is the hardest thing to judge as to other pathological states. We have the same thing in regard to the retention of granulomatous areas after removal of teeth. If sufficient time has elapsed for new bone to be formed, and we find rarefied areas about the apical region, we are justified in calling them pathological and classifying them as granulomatous areas. If sufficient time has not elapsed for bone formation, the only thing to do is to open the area and clinically ascertain the condition.

We have a lot of infection in the mouth from infected upper and lower third molars. Patients will retain these over a long course of time unless acute exacerbation drives them to someone for relief, and then sometimes after it is relieved it assumes a chronic state again and they carry them along. They are always a source of infection and the sooner they are out the better for the patient in every case.

The reflex neuroses from unerupted or impacted teeth is very little understood. So far as we are able to decide in dental circles, we find numbers of unerupted and impacted teeth with no pathology present and causing no trouble whatsoever. In all cases of head pains, those associated with nerve function disturbance, we give these teeth credit for being possible contributing factors. How much they have to do with certain inflammations of the eye we do not know. Where they are quiet we usually leave them alone unless there is some neurosis about the head that demand attention. We are unable to decide definitely, and unable to promise the patient anything after a rather severe operation.

Ill-fitting dental work of course is conducive to mouth sepsis, and it is sometimes overlooked in x-ray plates. A study of the interproximal bone spaces will also aid in x-ray findings. Foreign bodies impacted in the bone usually are readily discernible in x-ray plates, and usually are infected. Small pieces of amalgam will heal over sometimes very perfectly and be retained in the tissues, but practically all of them are in a state of infection. They are easily removed, and may be part of the infective process.

We have another thing that the Doctor did not mention, and that is infected dental cysts. Cysts develop rapidly about unerupted teeth and pursue their course until they destroy quite large areas of bone, spreading until the entire mouth becomes infected. They could of course contribute to eye conditions as well as any other infected area.

I think it would be timely to say a few words about the removal of infected teeth, the elimination and eradication of dental foci, from a more or less surgical standpoint. I do not believe that it is sufficient for the physician to tell the patient to go have his teeth out. The physician should know who takes the teeth out, how he takes them out, what the condition is—it is just as important as it is to talk to a surgeon. But, unfortunately, it is not done. Of course everybody here does it, but sometimes patients are subjected to a lot of harm in getting rid of the condition you are treating. By that I mean that I do not think you should countenance the removal of too much dental infection at one sitting. With the dissemination through the circulatory fluids you could kill the patient with quite large doses. The defensive reaction following the removal of dental infection is quite evident in any case which you study. I think the good physician will help the dentist in determining the amount to be removed in any particular case, because he knows more about the patient than anybody else. He has examined the patient and his findings should help the dentist to judge the tolerance to inoculation, and he should therefore convey that knowledge to the man taking out the teeth. We find that certain individuals after the removal of infected teeth will suffer reaction; others suffer very little. If it is an eye case, an acute condition, removal of the teeth and curettage of the gum may make it worse and do more harm than has already occurred, especially if five or six teeth are taken out at one time. I think these things are important.

The management of curettage is important. In the dental profession we are now going through the stage of bone scraping. Everybody bought curettes and had to scrape every socket, and what they did in a vast majority of cases was to break down the protective zone, break through the bony walls, and disseminate infection. There should be careful elimination of granulomatous tissue, and that is practically all that needs any curettement. In most cases the infection is encapsulated and the bone does not need to be scraped. It is good bone, it is dense, and curettage there is adding insult to injury. In other words, it is further inoculation. We do have cases in which the protective zone has not been established yet, and in which it is suicide to curette. This bone should not be scraped, but these things are done. They augment certain systemic disturbances rather than help, sometimes to the extent that they give no help. We have had deaths in Indianapolis hospitals traceable to the removal of too much dental infection at one time.

Another thing we advocate in dental surgery is drainage. All infected bone areas should be

drained. In the mouth the dentist may take the teeth out, the mucous membrane heals rapidly, or at least covers it over, and he expects it to heal and do well, but it does not. That is the reason we find these unhealed areas in the edentulous cases. All infected tooth sockets should be drained, and normally they should heal by granulation. Nature takes care of it in a vast majority of cases.

Areas of retained infection in the mouth, even after the extraction of all the teeth, are still perhaps responsible for a lot of systemic disturbances where it was thought removal of the teeth would help, but did not.

J. K. Leasure, M.D. (Indianapolis): This is a very interesting paper, and a subject that I think deserves considerable discussion. We are running across this condition more and more and I believe the field is narrowing down to where we can put a finger on it. Someone in the last *Annals of Otology and Rhinology* made this point—that all infections of the eye, except orbital cellulitis and abscess, were due to infected tonsils. We wonder why an infection so far removed might cause such a condition, yet I notice Doctor Pell said the third molar was accused most. Why accuse it more than the rest of the teeth? You all remember at this meeting a few years ago we emphasized that infected sinuses were the cause of orbital conditions. I think some of us have been disappointed when, after clearing up the sinuses, the eye condition did not clear up.

Edward A. Pape, M.D. (Indianapolis): I would like to report a case that I had about five years ago, a case of episcleritis that had gone the rounds and been treated by five or six oculists without anyone going thoroughly into the history of the case. The first thing I did was to remove the tonsils, which were badly infected. The vision, 20/70, came back to normal and remained so for two years. The case came back and I had x-rays made of the head and teeth. The x-ray specialist, who was a dentist, said the teeth did not need to be extracted, notwithstanding that the patient went to her own dentist, who said they did need to be extracted. He extracted all except the upper and lower incisors, but with no improvement in the eye. I refused to treat the eyes on the ground that I thought there were other infections that had been overlooked, and suggested to this patient that she have a thorough physical examination. There had also been in this case a history of monthly "bilious attacks" as she called them. After going through a thorough examination the case was referred to a surgeon and the gall bladder and appendix were removed, following which the eye came back to normal.

John J. Connelly, M.D. (closing): Nicholl stated that he found relieving the foci of infection to be much more beneficial in acute cases, or acute exacerbations of chronic cases. Rosenow made a series of experiments in which he used streptococci obtained from the joints in acute rheumatic fever from herpes zoster, and some others. He injected these into animals, and the results so far as the eye was concerned were rather peculiar in that he obtained conjunctivitis in some cases, iritis in others, hemorrhage around the limbus at times, even hemorrhage in the fundus in one or two cases, but there was no regular system by which he could say that the infection would be produced in the eye, or where it would be produced.

As to the tonsils, I have not in many cases found them the cause of eye conditions, although I am sure many men do find the tonsils the cause of trouble. Our experience has been that tonsils have not been as much to blame as teeth. So far as the gall-bladder and appendix are concerned, we have found very few cases that we thought due to them.

Another statement I want to make is in regard to dentists. I think it would be very wonderful if we could always send our cases of this type to a dentist like Doctor Pell. But it is frequently necessary to have the patient return to his home dentist, who may live somewhere in the country, and may have paid very little attention to the x-ray. So frequently we find that when these cases return to the dentist he sends a report that the x-ray man is wrong, that "there is no tooth there," when what we have advised was opening the socket. We hardly know what to say to this man because we knew there was no tooth there in the first place, and were not leaving it to our judgment as to what was occurring in the mouth. If we feel that the eye condition absolutely depends on some mouth trouble, then to have the dentist report that no tooth is present at the offending site, when the x-ray man has reported it is clearly a case of socket infection, makes it hard to determine just what to do. As Doctor Pell has said, there are many socket infections that undoubtedly are border-line cases.

MEDICINE'S PUBLIC RELATIONS*

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The past year has witnessed a broadside of adverse criticism against the increasing costs of medical care, both by lay individuals and the lay press. Hospital and nursing items constitute the central target for attack. Nevertheless the editorials always include medical management—or what they contend to be mismanagement—as a contributing factor to the public woe. Keenly aware of medicine's lifelong individual and mass sacrifices for humanity, the profession waxes indignant at each new reproach. Especially are they antagonized by the side play accompanying every program instituted by welfare agencies, and oppose all of them without examination of their possible merits.

*Presented before the Section on Medicine of the Indiana State Medical Association at the Fort Wayne session, September 25, 1930.

Ostensibly the press analyzes every health issue, and, quite as unprepared and uninformed as the physicians (above cited), criticizes the latter adversely. The press never loses an opportunity to denounce the actions of any of the smaller groups of workers, for the ruse never fails to win the acclaim of the masses. Thus more subscribers and greater popularity for the press, apparently one of its most important policies.

It is but a natural surmise that the medical profession's "passive resistance" (if I may paraphrase Soviet Russia's policy during the latter years of the World War) toward the press' attempts to inform its readers in health matters is what really irks the press. For instance, whenever a physician chats with an editor it is considered a lost opportunity should he fail to remind the editor that an accurately reported medical discovery is as fabulous as the great auk, or other similar non-existences. Unfortunately the same editor is ironically aware that this twitting physician will not lend the slightest assistance in editing the report, that must appear in the next morning's edition.

Public impositions by quacks and cultists are denounced roundly by physicians, yet they seldom volunteer to convey to the public information pertaining thereto. To a quite commendable extent, the weekly newspaper releases by our Medical Publicity Bureau have remedied that situation. Unfortunately such articles cannot be so timed that they will coincide with the breaks of the news. Interpretations printed ten days in the wake of startling happenings possess very little news value from the press standpoint.

Our time-honored policy of *laissez faire* has much to commend it, and has been instrumental in maintaining for the profession a dignified mien as well as a mystic aura. Alterations of long-established precedent never should be undertaken without calm deliberation. But the discarding of old faithful tools, in order to keep abreast of progress, is an even greater virtue.

Some members profess to see the handwriting on the wall, with its inscription of "State Medicine." I challenge any public agency, be it federal, state or privately directed, to outline a program of public health that cannot be outdone by cooperative private practice. Note, however, the employment of the verb "can be", rather than the verb "is."

Mindful that the section program is confined relatively to medical subjects, we leave the subject of "State Medicine" to the General Assembly. But it so happens that it is actually within the medical realm that the logical salient for an attack upon the general problem is situated. (That is the problem of educating the public, whose inadequate ideas are derived from unreliable sources.) That salient is mental hygiene.

Any random perusal of the *Atlantic Monthly, Harper's, Scribner's, Ladies' Home Journal, Good Housekeeping,* or their like, invariably brings to the reader's attention articles dealing with various phases of mental hygiene. Seldom are they prepared or edited by doctors of medicine. The best sellers of the book stalls are no longer novels, but bear such titles as "Why People Behave Like Human Beings," "Character in Glands," "Behaviorism," etc. Every daily carries a column on child training, seldom prepared by a physician—at least not by a physician of any experience.

In my home city a group of young women of high ideals constitute a Mothers' Club. They represent the best stock of the community. They meet frequently, and deliberate seriously. Approximately one hundred mothers rear their children in relative conformity to the standards therein developed. Last year, realizing the necessity for better knowledge of mental hygiene, they decided it would be worth while to employ the club funds to obtain the best available lecturer on child training. Never having heard of the medical profession's participation in educating the public, naturally they sought for a teaching psychologist. A limited vocabulary prevents my properly describing his instructions for child training. Even Doctor Freud would have been encouraged—yea, amazed! A typical example was his explanation for bed wetting. It is because of the sexual gratification obtained by the warm urine flowing down infants' legs. As the professor had to catch a train at the end of his lecture, he failed to mention why the child slept placidly through the night after the pools of urine had turned cold.

Last winter the press carried an unusually large number of crimes committed in the heat of passion, with successful defenses of the criminal by adherence to the plea of insanity. The St. Joseph County Bar Association desired scientific enlightenment upon mental disorders. The well-qualified and reputable psychiatrists of Indianapolis and Chicago were not considered. Instead, a Chicago politician professedly a psychiatrist, whose ideas always have been more amusing than serious in psychiatric circles, was invited to address the lawyers. That we physicians could not help. But when various physicians were called upon to comment upon the lecture, not a dissenting voice was heard. And yet we ridicule lawyers for their absurd concepts of mental disorders, and their concepts of the criminal's lack of responsibility for his behavior. Even the *Journal of the American Medical Association* permitted a member of its staff to write editorially as follows:

"The behaviour shown by persons who follow a career of crime is founded also on defects of bodily constitution, faulty training or both, and may equally be labeled mental disease. This conclusion is permissible even when the criminal has shown no evidence of mental disease other than his criminal behavior."—*(Jour. A. M. A.,* Aug. 2, 1930.)

Public schools are taking more and more cognizance of backward children, and upon a teacher's

diagnosis alone relegate them to special classes. Deans of several endowed universities, such as Princeton, declare it a waste of time to handicap their classes with students of seeming mediocre ability. Consequently they devise entrance requirements calculated to cull out the undesired, and preserve the prodigies. Physicians take little or no part in the examination of these problems in mental hygiene.

Prior to the opening of Indiana's public schools each year, most of the counties conduct an institute for the instruction of teachers. At St. Joseph county's last two sessions they were addressed by Will Durant and Albert Edward Wiggam, respectively. Both are reputable and able students of psychology, but neither has had experience with the courage and the frailties of specific individuals, comparable to that of any country practitioner. For instance, Professor Wiggam's entire theme consisted in proving—by statistics—to the teachers that heredity determined the calibre of the minds of their pupils. Furthermore, that by ordinary exposure to information the abler-minded children easily would absorb all the necessary knowledge. And that to the contrary, the minds of lesser hereditary capacities would not absorb much of the training anyhow, so why spend such great efforts to train the weaklings, especially since statistics prove that these mental weaklings are only a burden to society. Your children and my children have to be trained by teachers so instructed. Think it over!

I surmise that a number of physicians of this audience are thinking, "Well, psychiatry is a highly technical specialty whose principles are yet in dispute among its very leaders, so why add more to our burdens at this juncture?" Partly true. Although any audience of general practitioners who have never taken a course in psychiatry readily can acquire the essential knowledge of signs and symptoms of the commoner mental disorders, after a few demonstrative lectures. But I refer to psychology rather than psychiatry. Every physician of ten years' general practice has become inoculated unconsciously with a sound working knowledge of psychology. He need not be able to differentiate between a conditioned reflex and an acquired characteristic. He need not know the technic for the application and evaluation of a Binet-Simon capacity test. He need not ponder too seriously as to the outcome of a suppressed desire, if not properly sublimated. As in Pope's "Essay on Man," "The study of mankind is man." Every physician knows his men. He knows what his patients will be likely to do under given circumstances. He knows what readjustments are necessary to bring out the best in each individual.

I hold great respect and esteem for the nonmedical psychologist whose tests and observations have added much to our knowledge of the mind in action. But, gentlemen, I hold that the key to the problem of education of the public in mental hygiene is one of distribution. We of private practice have the men already in the field; already we have observed our patients' mental reactions, so that their present problems require only consideration of the issue from the time of its special occurrence.

Please understand me. I have no sympathy with the viewpoint so often expressed or implied in current medical articles. That is, the "labor union idea" of physicians banding together, for the purpose of not allowing any kind of health services and their resulting fees to stray beyond the regular medical field. I blush to admit that such a pitiable attitude is advocated within a noble profession, but am gratified in that it represents but a small proportion of our membership. I advocate physicians' editing of medical news reports; I advocate physicians writing and teaching practical psychology; I advocate physicians acquainting the courts and the bar with the actual responsibilities for behavior by the various types of mentally disordered—responsibilities for behavior as determined by years of experience with the individual's conduct, rather than responsibilities evaded by ingenious theories. These acquisitions are advised not for the selfish garnering of wider ranges for practice, but solely because physicians are qualified both by experience and training better to serve the public interests in these regards than any other class of workers. It is high time we put aside certain nebulous ethical restraints and unswervingly proceeded toward such rational objectives.

The problem of state medicine doubtlessly has many vulnerable points. From my associates in surgery and other special branches I am sure will come opinions and definite plans. Our Bureau of Publicity will furnish ways and means, I am confident. But they should be encouraged and aided by the sentiment of the special sections, and of the assembly in general.

In medicine an exploitation of mental hygiene seems so natural and timely that future medical generations probably will marvel at our recent aloofness. Gentlemen, may I remind you of a duty to medicine and, what is more important, a duty to mankind?

Discussion

Charles A. Sellers, M.D. (Hartford City): We are all agreed that our attitude toward the public press is wrong, as is the attitude of the press toward the medical profession, and at times the press is agonizing. But the remedy must lie within our own power and not within the power of the press. Our individual county unit must organize and get to the public the needed information. Probably the one reason this is not done is lack of an incentive; that is, payment for the time and labor expended.

Paid medical press writers of the present day do try to put over some heavy medical information for the public to digest. The press will use information if they are paying hard-earned cash

for it, but do not care much for that which they get for nothing. Probably if we informed them that we had a good piece of medical news they might be glad to compensate us for it. Why not? Isn't it to be had in every doctor's shop?

Mental hygiene and psychology we all use, consciously or unconsciously, in our everyday practice, and do quite well with that part of the work up to the kindergarten and school age; then we get out from under and leave the public school nurse, the teacher and social service worker to finish the job. I wonder why? I believe the only answer is for organized medicine to work this out, just as we are attempting to do at the present time. It is our duty as members of this Association and Section to suggest to the right committee our desires in these matters.

ALBERT E. STERNE, M.D. (Indianapolis): I regard Doctor Hoffman's paper as extremely timely, and more important than one would realize until he actually thinks about it.

A satisfactory solution of this big problem would not be an easy thing to accomplish. Doctor Hoffman has cited the fact that the medical profession for generations has, so to speak, hidden within itself; it has been afraid to emerge from the ethical shell and allow the really nutritive kernel of its knowledge to pass out to the people in a general way. No thoughtful person, be he physician or layman, can but be impressed with the tremendous power wielded by the things that are said in the columns of the daily newspaper. The columnists wield a tremendous power, and we could wield that same power if we had the channel through which to accomplish it. There is no reason why a body of medical men—to avoid the charge of any single doctor trying to reap personal gain from it—could not wield this power. It is possible that one phase of this could be accomplished and at the same time do something valuable in what is spoken of commonly as state medicine. I only wish to allude to one thing: we can make up our minds that doctors, and especially doctors of the future, must accomplish something distinctive and practical in that direction, or it will be done for us. There is no sidestepping that proposition. In every city—and the larger the city the more this will be necessary—there should be established regional clinics, groups of men well balanced, representing all that comes into the practice of medicine. These groups can be established so that they will cooperate and work together. This does not mean that anyone may not choose whom he wishes to see, but the natural tendency would be for the regional clinic to draw from the area in which it is situated, and if they are on more or less of a parity they can be regulated well. The bigger the city the more clinics, and we can hit the point in that territory that Doctor Hoffman brought out, for gradually that body of men will achieve a reputation and power, directed by good common sense and experience, that will have an excellent effect.

I think Doctor Hoffman is absolutely correct in the premises he takes and the conclusions at which he arrives. There is too much pseudopsychology spread about by those who know nothing, or very little, of the subject. Psychology as it applies to things non-medical is one thing. Psychology as it applies to things purely medical is a different proposition. A good psychiatrist must know the abnormal, the psychiatric side, if he is going to be a real psychologist. He cannot evade that.

I blame some of the members of the medical profession for increasing the unfortunate tendency that is everywhere apparent. People like to believe the bizarre, the mysterious. They always have and always will. There are many bizarre ideas prevalent among the medical profession. There are many Freudian teachings which are erroneous. In all my experience I have never seen a single case that required formal psychoanalysis that could not be cured by explanations that really explained, without recourse to all this hocus-pocus. On the other hand, I have seen many patients in pitiable state after a formal psychoanalysis has been made. I do not mean to say that in some instances psychoanalysis may not be of some value, but I do wish to say emphatically that the things that supposedly the patient keeps suppressed and that the psychoanalyst can pull out are bunk. Most patients know perfectly well the elements of the suppressed complex. To combat that we must give them explanations that explain. That is just what the persons referred to in Doctor Hoffman's paper are not doing. We must come down to plain common sense backed by knowledge. That is what mental hygiene is, or any other kind of hygiene. The practice of preventive medicine, of whatever type, is likewise good judgment supported by accurate knowledge of the true significance of hygiene, child-training, medicine and surgery; and, moreover, the teachers should be the doctors as a body of learned men.

NITROUS OXID-OXYGEN ANESTHESIA*

(A CONSIDERATION OF SOME ASSOCIATED FACTORS)

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Nitrous oxid-oxygen is so well known in this locality through the work of your members for many years that we may proceed at once to the details of the subject.

Hypnotics. Not so long ago the value of any hypnotic was widely disputed, but gradually it became accepted as an aid until the use of morphine and atropine became almost a routine practice. For many years I have questioned the value of atropine, prior to nitrous oxid-oxygen narcosis, mainly from its acceleration of the pulse and respiration—both of which effects are exhausting

*Read before the Terre Haute Academy of Medicine, January 2, 1931.

and calculated to embarrass rather than protect the patient from shock. I usually have preferred hyoscine to atropine where the upper centers were to be controlled or depended upon morphine alone. We are now in the midst of a clinical re-investigation of the pre-anesthetic hypnotics.

In the past two or three years Zerfas and many others have advanced the use of barbiturates. Sodium amytal, pernocton, nembutal, allonal and a few others are already at our disposal. They are variously administered by mouth, by rectum and intravenously with much the same results—depending more upon the type of barbiturate and dosage than the avenue of introduction.

In addition to the advantage of these new drugs, their use has further emphasized the desirability from the patient's viewpoint of relieving anxiety and fear on the day of operation, and also have brought us to a better appreciation of adequate premedication rather than the routine and inadequate dosage generally practiced with the older drugs, morphine and hyoscine.

Most of us have not used hyoscine in sufficient doses, Van Housen of Chicago being the outstanding exception. Doctor Van Housen has been unable to convince the profession at large, although her work and writings have given reasonable assurance of safety and satisfaction from rather large doses.

Preparations of hyoscine over one year old are known to produce delirium of varying degrees and duration after their administration. Three such cases from the same bottle fell to my lot, which although not particularly serious would have been sufficient to discard the drug had they not occurred after many years of satisfactory experience with it.

Barbiturates are not a substitute for morphine since they afford inadequate protection from pain reflexes, but should be used, I believe, in conjunction with full doses of morphine.

It is futile to attempt to use nitrous oxid-oxygen routinely for major surgery without particular care given to the premedication of the patient. The barbiturates are not anesthetics but are valuable aids to anesthetics in proper dosage. In our early experience with sodium amytal we used too much and there resulted marked drops in blood pressure, a very long post-operative period of unconsciousness, rather frequent delirium requiring restraint, all of which were particularly undesirable in certain cases. There was, however, less nausea and vomiting than from morphine alone, which was an advantage. We soon learned, however, that much smaller doses (three to six grains) gave less annoyance and more satisfaction, although we still had some post-operative disturbances with hallucinations and occasionally delayed recovery of consciousness.

More recently we have also employed pernocton and nembutal—barbiturates which in moderate doses are said to be eliminated more rapidly. In our experience they resemble a good hyoscine result. Inasmuch as their action appears to be somewhat more constant or uniform than hyoscine preparations, they may prove to be better.

As a pre-anesthetic hypnotic for nitrous oxid-oxygen a full dose of morphine plus sufficient barbiturate to secure a tranquil, fearless, semi-conscious state seems a nearer approach to the ideal than a deep sleep from larger doses of the latter drug. A good margin of safety to be under the control of the more flexible, less depressing and instantly variable effects of nitrous oxid-oxygen is preferable to a heavy barbiturate and light nitrous oxid-oxygen dosage.

Roughly half of the anesthetic may be borne by the hypnotic. When this is done not only is the patient better able to resist shock, which is rarely seen under proper conditions, but the general safety of the patient is certainly increased during as well as following the operation.

Any agent which may produce a marked fall in blood pressure in a short period of time whether it be a powerful anesthetic such as chloroform, a spinal anesthetic, or a hypnotic, which may not be withdrawn readily, will not prove to be a safe agent in the wide range of conditions encountered in major surgery. And, therefore, it is our job to select drugs and doses to obtain the desired results while avoiding such toxic or dangerous manifestations.

On the other hand, probably more lives have been lost from the shock for the want of adequate doses of morphine than any other single cause. It is difficult to overrate the importance of adequate pre-anesthetic hypnoses.

Examination of Patient

Vital Capacity. In addition to the usual physical and laboratory findings the anesthetist could often find some help if the vital capacity of the patient was measured at the time of his physical examination. Vital capacity gives a better estimate of the efficiency of the respiratory system than almost any other test—more important than routine examinations of the lungs, since the anesthetist is more interested in efficient ventilation than in the particular pathology present, be it empyema, abscess, tuberculosis, or even pneumonia. With the onset of pneumonia the vital capacity is almost immediately reduced to fifty or sixty percent of normal, while in pleurisy with effusion it is also restricted. Serious cardiac affections, particularly mitral stenosis, reduce the vital capacity; emphysema and asthma reduce it. A reduction in the vital capacity calls for care in maintaining adequate ventilation since the patient has lost a certain margin of the respiratory function, which not only interferes with his absorption and elimination of gases at operation but compromises his chances of recovery after an operation.

The test is made quickly by having the patient completely empty his lungs into a spirometer after a maximum inhalation of air.

The normal vital capacities vary with the height. In children, the following normals accord-

ing to height have been obtained by Edwards and Wilson:

Height in Inches	Vital Capacity in Liters
40	1.2
48	1.6
52	2.0
56	2.5
60	2.6

From the Departments of Physiology and Pediatrics, Cornell University Medical College, by D. J. Edwards and May D. Wilson.

For Adults

Height in Inches	*Hutchinson's Cases Vital Capacity	†Hewlett and Jackson
62	3.0 liters	3.5
64	3.2 liters	3.6
66	3.4 liters	4.1
68	3.6 liters	4.4
70	3.9 liters	4.6
72	4.1 liters	4.8
74		5.2

In patients past fifty, vital capacities may be reduced by loss of elasticity of the lungs with dyspnœa, not otherwise complicated with heart disease (Scott). In cases of thoracoplasty the amount or reduction of vital capacity by the operation must be taken into consideration or the patient may be rendered short of breath for the remainder of his life. A sudden reduction in vital capacity often points to the onset of some post-operative pulmonary complication.

The vital capacity is reduced five to ten percent by the recumbent posture, while in fat women the reduction is more marked in the Trendelenberg position.

Between the tidal volume of respiration and the vital capacity the patient is normally able to adjust ventilation to his metabolic requirements of eliminating carbon dioxid. The rate of respiration also comes into play to the same end so that the anesthetist frequently sees patients who are unable to increase materially the depth of respiration during anesthesia, but in whom the less desirable compensation is accomplished by increasing the *rate* of breathing.

Carbon Dioxid and Anoxemia. Through the work of Henderson and others carbon dioxid has been receiving more attention than usual in recent years. It is used to stimulate the depth of breathing during anesthesia, to augment exposure in the lungs and absorption for deeper anesthesia also after ether anesthesia more quickly to "blow off" or eliminate the ether from the blood, to stop hiccough, as a prophylactic against pneumonitis, etc.

For these purposes from five to ten percent carbon dioxid is administered. Normally there is about six percent carbon dioxid in the alveolar gases, or four percent carbon dioxid in the total exhaled gases. Now five percent added to this usually will increase the tidal volume or depth of respiration from fifty to one hundred percent. While carbon dioxid is the normal respiratory stimulant, not all patients react typically. Possibly the depth of anesthesia may be responsible, in some, for the failure; in others, with rapid breathing, restricted air-way may be the cause; or reduced vital capacity may be at fault. When a patient fails to respond to carbon dioxid with an increased depth of breathing, one is tempted to increase the volume or percentage of carbon dioxid to produce the desired effect when the patient may be overcome rather quickly with carbon dioxid, arresting respiration and necessitating resuscitation with pure oxygen by inflation of the lungs a number of times to wash out the carbon dioxid. Carbon dioxid in one respect is not different from many other drugs—it first stimulates in small doses, and depresses in larger ones. This fact must be kept in mind when carbon dioxid is being used.

Rebreathing is used for the same purpose and inasmuch as rebreathing also reduces the consumption of gases, and at the same time conserves heat loss during long operations, it is usually preferable to administering carbon dioxid from a tank of this gas. It, however, requires two or three minutes to obtain increased tidal respirations by rebreathing; whereas, carbon dioxid accomplishes it more promptly, but with greater danger of overdosing.

Mixtures of carbon dioxid (five percent) in oxygen (ninety-five percent) are advocated for resuscitation of cases overdosed with ether, asphyxiated with automobile exhaust gases, etc., and asphyxia of the new born. *In these cases it is the high percentage of oxygen that maintains life and restores respiration rather than carbon dioxid, which stimulates respiration only if the respiratory center is still irritable.*

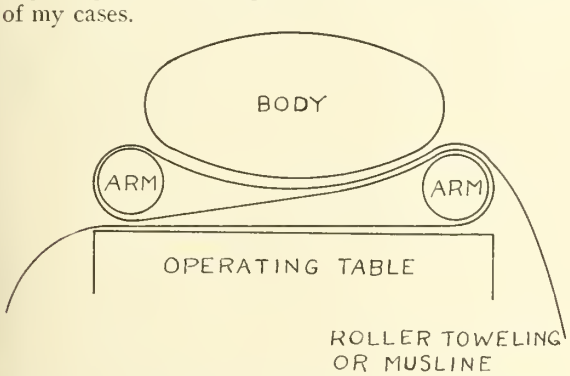
When oxygen may be forced into the lungs then carbon dioxid is unnecessary as a resuscitant. Carbon dioxid is of value where, due to the want of satisfactory apparatus for insufflation, there is need of an irritant to cause the patient to take a breath. But such inefficient, passive methods of resuscitation have no place in a well-equipped operating or delivery room. The hospital is a place where efficient artificial respiration with pure oxygen by the inflation method should be available at all times. Recently a three-year-old child was asphyxiated in a garage. In a very critical condition, she was rushed to a hospital, placed under an oxygen hood for a few hours and sent home apparently recovered. Had respirations ceased, she should have been slowly insufflated with oxygen to start breathing, and then placed under the hood for further oxygen treatment.

*Hutchinson, J.: On the capacity of the lungs, and on the respiratory functions with a view of establishing a precise and easy method of detecting disease by the spirometer.—*Med. Chir. Tr.*, London, 29:139, 1846.

†Hewlett, A. W., and Jackson, N. R.: The Vital Capacity in a Group of College Students.—*Arch. Int. Med.*

Oxygen-want at first increases the rate of breathing, but if anoxemia is of sufficient degree, respirations become slower, more shallow and finally cease. This is a fact well known to anesthetists, but sometimes overlooked when an obstructed airway limits the amount of air or gas actually inspired while the chest movements may appear to be normal in amplitude. When actual measurements of the patient's respiration are made throughout narcosis, however, one is surprised to learn that the slightest snore reduces the tidal volume by half or even more in certain cases. Such interference with respiration not only restricts the exposure of gases for absorption and leads to both an accumulation of carbon dioxid and oxygen-want, but increases the difficulty and rate of breathing. This is often the fault of the anesthetist, but sometimes it is due to a bunch of hemostats in a thyroid case, a tongue depressor in a tonsil case, or an accumulation of mucous in the throat under ether.

In the thyroid, nitrous oxid-oxygen may be administered under pressure to compensate for the partial obstruction to respiration until the vessels are tied. An artificial airway for the ordinary situation together with change in position of jaw and tongue usually corrects it. If by chance the ligatures continue to obstruct respiration after pressure of gases has been released, then the particular ligature causing the obstruction must be removed before closing, or the neck may have to be reopened a few hours later when swelling has taken place and the patient is almost asphyxiated, requiring artificial respiration, as occurred in one of my cases.



Posture. Since the respiration is most efficient in the sitting posture, and since blood runs out of the mouth in this position, I prefer tonsillectomy, extraction of teeth, antrum and other nasal cases in this position. But even in this position the tongue depressor is a dangerous instrument in the hands of one who places it in the middle of the tongue and attempts to expose one or both tonsils by straight downward pressure. The tongue depressor should always be used as a *tongue retractor,* pulling it forward and away from the tonsil to be exposed, and affording an ample breathing passage in the angle exposed. Deep Trendelenberg positions are most embarrassing to respiration in fat patients.

The pressure of the patient's arms folded across the chest is an unnecessary interference to ventilation. Probably the best position for the arms is at the sides easily secured by a piece of toweling forming two long pockets from wrist to elbow on either side and drawn by the two free ends until the arms come close to the sides. Care should be taken not to draw so tightly as to interfere with the circulation of the arms. The towel is better than narrow cuffs since the towel prevents the arm from hanging over the edge of the table, which has caused "wrist-drop."

Cases with unusual types of respiration such as Cheyne-Stokes breathing are sometimes encountered, and like *pulsus alternans* they usually disappear during a nitrous oxid-oxygen narcoses to reappear immediately after the operation. If they make their appearance during the operation, either there is need for more oxygen in the mixture, or more rebreathing, and when the correction is made they rarely recur. Cardiac dyspnœa is relieved usually under nitrous oxid-oxygen.

It is a great advantage to have the patient brought to and from the operating table in his bed, and to make the operating table as comfortable as possible with a fairly thick pad, a pillow under the knees, another under the back and one under the head to prevent backache, and to loosen abdominal muscles by slight flexion of the legs. The legs should remain in this position even in the Trendelenberg position and not be dropped down or flexed at the knees as some tables are arranged to do. The shoulder rests should be well padded and high enough to compensate for a really comfortable table pad or mattress.

Whether the patient is conscious or semiconscious, the induction of anesthesia should be carried out carefully, lifting the inhaler during exhalations, but applying before inhalations to prevent, as far as possible, the patient's impression that a rubber inhaler is to be clamped tightly to his face. After consciousness is surely lost this procedure is replaced with the greatest care to keep the inhaler air-tight, and the air-way perfectly free throughout the narcosis. From this moment the anesthetist becomes the surgeon's consultant, advising him if any untoward condition makes advisable a change in operative procedure. Blood pressure, pulse, respiration records are material aids in checking the condition of the patient, and in gauging the proper level of narcosis in addition to the usual muscular signs of anesthesia.

Surgical Technique. There are great differences in the technique of surgeons. One makes a little incision through the skin, undercuts the fascia and struggles to close; another stirs up his patient by exploring the abdomen after performing the intended operation, thus requiring unnecessarily profound narcoses at the end. Some take up all the slack in the peritoneum by suturing the lower angle first and then struggle to get the peritoneum together at the upper angle.

An orderly procedure of exploration, operation and closure by the abdominal surgeon is always helpful to the anesthetist, and relieves the patient of a prolonged, deep narcosis. Much of the time during many abdominal operations anesthesia may be maintained at a rather light level. There are times when deep relaxation is necessary, but it is never well to keep the patient at this level for long periods if depression and shock are to be avoided. In this connection it should be pointed out that nitrous oxid-oxygen may be administered in light planes without eliciting vomiting, which is one of its advantages over ether, chloroform, or ethylene anesthesia.

Self-retaining abdominal retractors are an aid in maintaining relaxation inasmuch as they do not "pull and slack" the musces to stimuate muscular tonus. After the incision has been held apart for a minute or so, muscular relaxation follows and is retained unless anesthesia becomes too light or too deep. Profound anesthesia produces muscular rigidity, which is as troublesome to the surgeon as light anesthesia. It is, therefore, the duty of the anesthetist to secure deep anesthesia during incision and exploration, normal to light anesthesia during the remainder of the operation to secure and maintain adequate relaxation without depression of the vital functions of respiration, cardiac rate and blood pressure.

Depression Test. Sometimes what appears, from the muscular signs of anesthesia, to be a normal plane, the blood pressure begins to fall off gradually. A simple test will show whether the anesthesia is too deep, in fact, or whether the depression is due to loss of blood, or general weakness of the patient. It consists in giving the patient two or possibly three breaths of pure oxygen followed in the next two minutes by blood pressure readings. If this administration of oxygen is followed by a progressive rise of blood pressure to or above the patient's normal, the depression had been due to profound anesthesia, and the narcoses should be lightened.

The hyperthyroids are particularly susceptible to deep anesthesia and are more frequently depressed than other patients in better condition. This depression test is here most helpful. Nitrous oxid-oxygen in these cases is the best anesthetic, because it both eliminates the psychic depression of local, and prevents vomiting when maintaining anesthesia light enough to avoid cardio-vascular depression. Mechanically the gases, under slight pressure, aid an embarrassed respiration from traction and dissection of the gland.

Other Aids. Nitrous oxid-oxygen with suitable apparatus offers many aids during operations other than the anesthetic *per se.* A few examples may prove interesting.

With intestinal obstructions the gut may be black, calling for a decision regarding resection. The administration of several breaths of pure oxygen, if circulation is sufficiently active to maintain life in the loop involved, gives to the gut a lighter color.

In taking an x-ray of the chest while under anesthesia, deep anesthesia is first induced, followed by filling the lungs three times with pure oxygen and then making the exposure. After the oxygen inhalation the patient does not breathe for from ten to twenty seconds while the plate is made, since there is no demand for oxygen nor need of respiration to eliminate carbon dioxid for this short period.

In Cæsarian section for eclampsia, a convulsion may occur before or when starting the anesthetic. In some of these cases the convulsion may threaten life by the prolonged period of apnœa from the convulsion. Here oxygen forced into the lung cuts short the convulsion and supports the circulation.

Foreign bodies in the bronchial tree often present an emergency for inflation of the lungs with oxygen either before or during the operation. Where the foreign body has been inhaled during an operation, such as a tooth, a filling, a wad of gauze or cotton, an adenoid, tonsil, a blood clot, or a chunk of food vomited and inspired, it is always possible to inflate the lung with oxygen under pressure, thus lightening the anesthesia, restoring the cough reflex, when the patient usually will cough out the foreign body. But if the foreign body is permitted to remain for a short time, mucous forms about it and interferes with its expulsion even by coughing in many cases.

Fulguration of the larynx for papilloma is a direct indication for nitrous oxid-oxygen inasmuch as this anesthetic in all proportions is non-inflammable and non-explosive, and affords the means of meeting any of the common emergencies encountered in laryngoscopy in these little folks suffering from asphyxia.

The anesthetist again performs a very important function in operations upon the chest and lungs. Here the administration of gases under from ten to twenty mm. Hg. has rendered these operations relatively safe, and accounts for the favorable results now being obtained without unusual equipment or difficult technique. In these cases the tidal respiration is always endangered by the operation unless pressure is employed. Endotracheal administration of the gas may be the mode, but it is not obligatory as the ordinary face inhaler technique is quite as efficient and much simpler.

In conclusion, I want to thank your society for the honor of addressing you while pleading for a close cooperation between the surgeon and anesthetist to the end that the patient may be better treated and earlier returned to health and happiness.

DIET FOR THE OPERATIVE PATIENT

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For as many years as there have been surgeons and operations there has been little change in pre-operative and post-operative management, especially as concerns diet. The gastro-intestinal tract always has been considered a very unclean portion of our anatomy and much of the so-called indigestion can be ascribed to man's earnest endeavor to keep this part clean. The surgeon, therefore, always has used purgatives to prepare the patient for operation. One only has to be reminded of the emergency operations to know that this is wrong. Here there is no preparation, and here one finds the least amount of post-operative trouble referable to the gastro-intestinal system.

There are two chief causes for post-operative intestinal discomfort: (1) Purgation, (2) dietetic errors.

The chief constituent of most post-operative diets is fruit juices. These juices are very irritating, causing increased peristalsis, spasm and gas. Another rather common diet is the exclusive milk diet. There is considerable residue in milk and it is not well borne by many patients.

What then is the best management of these people to be operated upon? A few days' rest in bed, with sedatives for sleep, a bland diet and a plain water enema the night before operation is all that is necessary, unless of course colon resection is to be undertaken, when a different preparation may be necessary. It is important to begin small feedings early, as soon as the nausea has ceased. Especially in elderly people frequent small feedings are better.

Hospital diets are many and confusing as a rule, and very few surgeons know exactly the diet he is prescribing. The ideal post-operative diet is one with little residue, finely divided and easy to masticate and swallow. The bland diet consists in cooked cereal, as cream of wheat, eggs, white bread, butter, custards, floats, rice, soft puddings, ice cream, macaroni, spaghetti, broth, cream soups, meat and crackers. Four or five days later pureed vegetables may be added, and a little later pureed cooked fruit.

The care of the bowel is of great importance. Laxatives and irritating enemas give but temporary relief and seem to continue the trouble. About the third or fourth day after the operation an oil retention enema is given at bedtime, followed the next morning with a small, plain water enema which only empties the lower colon. This does not disturb the physiology of the colon, and does everything that a natural evacuation accomplishes. It is a very common statement for patients seeking relief from intestinal disorders to date all these troubles to their operation. Every patient taking an anæsthetic has some abdominal discomfort, but these measures will keep this discomfort at the minimum.

THE EFFECT OF EMOTION ON SECRETIONS*

With Special Reference to the Thyroid Gland

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The effect of emotion on secretions has been a matter of common observation for many centuries. In general literature, even more than in medical writings, one finds allusions to the effects of emotion on secretions of the intestines causing diarrhea, the kidneys causing polyuria, and upon the lachrymal and other glands. In spite of the decided obviousness of those phenomena and their apparent cause, little attention has been paid to these effects in the elucidation of medical problems. This I think has been true especially in the last one hundred years during which scientific medicine, under the impetus given it by Virchow, has concerned itself chiefly with cellular alterations and structural defects and has neglected, at least until recently, the possibility of chemical changes and variation in electric conditions apart from alteration in structure.

Another reason for this state of affairs is the tendency for medical science to take the Galenic rather than the Hippocratic point of view; to regard the disease rather than the person diseased, and to make a conceptual rather than a perceptual diagnosis. Certainly the Galenic idea lends itself much better to some of the chief avenues of advance of scientific medicine: namely, laboratory diagnosis and animal experiment.

In emotional disturbances laboratory diagnosis is not available and animal experiments are difficult to control. We have no means of measuring emotion or inducing it at will, nor can we be sure that the result of an experiment in an animal is transferable to man. True, we can scare a cat by bringing a dog in the room and we may roughly measure the effect by observing the phenomena induced in the cat, but we also note that only some cats show these phenomena and that the effect varies greatly. In view of this variability it is obvious that we cannot know that the same effects will occur in man. About all we can say is that the effects are variable both in man and animals.

Having considered this question for some time it is my opinion that we can learn more about the emotions by observations on man. Man is, after all, a decidedly different sort of animal especially when it comes to emotions and their effects. No other animal either laughs or weeps, to cite only two emotional phenomena that seem peculiar to him.

*Presented at the meeting of the Tri-state Medical Society at Fort Wayne, Indiana, April 8, 1930.

It is most important in any scientific discussion to define accurately the terms used and this is especially true of "emotion." I am using this word as it is defined by Janet, professor of psychology at the Sorbonne: "When an organism perceives the necessity of adapting itself to its environment and at the same time perceives its inability to adapt itself—then there results a series of phenomena that taken collectively we speak of as an emotion."

You will please note particularly that "feeling" may accompany and be part of an emotion but is not synonymous with it. There is such a thing as a painful emotion, but pain itself is a feeling, not an emotion. Unfortunately, Cannon in his book, "Bodily Changes in Pain, Hunger, Fear and Rage," uses the word emotion almost interchangeably with feeling, but explains in a footnote (page 3) that emotion is the stronger affective state. This leads him into the difficulty that he observes feelings causing results directly the opposite of emotions. There are feelings or affective states favorable to gastric secretion, but all of the emotions as Janet defines them are unfavorable. For instance, Bickel and Sasake start gastric secretion in a dog by sight of meat, then enrage the dog by a cat—immediately the secretions stop. These opposite effects could hardly be explained if "feeling" and "emotion" had the same or even similar neurological mechanisms.

You will also note that in an emotion there are two factors—the conflict of ideas and the phenomena, both mental and physical, that are a part of such a conflict.

I regard any such phenomena from the viewpoint of physiologic reactions of the nervous system. When we attempt to explain the basis of these phenomena we should turn to the physiologist rather than the psychologist. Physiologically, the nervous system is the mechanism that coordinates the various activities of the different organs and adapts the organism, as a whole, to its environment. There are two absolutely essential qualifications for all living organisms. Primarily, the organism must be adapted to these ends. It must be self preservative in or against its environment, and self reproductive. If the latter function is lost the species ceases to exist; if the former, the individual ceases to exist. This adaptive mechanism must regulate the function of the organs of the body as well as regulate the activities of the body as a whole if such regulation is to be effective. The observation of Sherrington of Liverpool ("Integrative Action of Nervous System") shows that in making these adaptive regulations, which may be called reflexes, the nervous system acts as a whole and that, in general, a reflex may be increased, diminished, or inhibited altogether, by the presence of other stimuli which entering the nervous system at the same time conflict with the original in effect even though definitely removed from it so far as known anatomic pathways are concerned. In the decerebrate animal the reflex of the greatest biologic utility usually has the right of way and inhibits others. However, in cases where there is such a conflict, these reflexes will result in changes in the activities of organs that will be incoordinate and not adapted to the activity of the body as a whole. Such activities we must regard as analogous to or, in fact, to be the phenomena of emotion as above defined. If we wish further to know why these reflexes differ in different individuals or in the same individuals at different times, we find the explanation, at least in part, in Pavlov's studies of what he calls conditioning in reflexes. He has demonstrated that the salivary reflex in a dog that originally was excited by the sight of meat may, by the training of associations, be excited by the sound of a bell and by associating the sound of a bell with some other stimulus, a third step away from the original stimulus, may excite the same response. It is not to be supposed that, in such cases, a demonstrable structural change occurs in the nervous system, but there is an obvious change in the effects of stimuli which might appear pathological unless the cause were known. It is obvious that such conditioned reflexes must not infrequently come in conflict with the biological needs of the animal and result in an increased number and intensity of conflicts. It is most important in studying emotional effects that we know the ideas, that is to say, the previous training or education of the individual. The problem of a rational scientific therapy is to find the conflict and correct the erroneous idea. Another important point is the possibility of repression of the idea with the persistence of the effect. This is a major difficulty to be overcome in the recognition of these cases. The patient feels the emotion as painful and desires to suppress it, hoping by suppressing the idea to remove the pain. To deny the existence of a conflict too painful for conscious contemplation does not remove it or its effects, but results in the patient, often honestly enough, denying the existence of any such conflict in his consciousness; that is to say, so far as he is aware. Under such circumstances recourse must be made to the various methods of exploring the subconscious.

I have devoted considerable time to discussing emotion for the reason that we wish to put these phenomena where they belong as physiologic phenomena of the nervous system that are pathologic only insofar as they interfere with the efficiency and happiness of the individual. I may remark in passing that while such observations have little in common with psychology as it is commonly understood, they fit in completely with the "Gestalt psychology" of Koehler (Wolfgang Koehler—Gestalt Psychology, New York, Horace Liveright, 1929).

In my own observation regarding the effects of emotion, as above defined, on secretions it occurred to me that instead of transferring the observations on experimental animals to man, it would be more satisfactory to study man and by observing the

effects of emotion on some easily observed secretion to build up some theories as to the effect of emotion on secretion in general. Transferring effects from animals to man may be invalid because we do not know that man would react in the same way. The nervous system of animals is similar to that of man, but also importantly different. Emotions may depend on training, conditioning in both animal or man, but we have no way of knowing that the training is the same in both cases. The observations in man concerning one secretion may be transferred to other secretions only within certain limitations, but it seems to me that such a method may be important even if it acts merely as a supplement of the animal experiment or as a suggestion for further animal experiment.

Perhaps the most easily observed secretion is the lachrymal and its relation to emotion is well known. While the primary function of tears may be to keep the cornea and conjunctiva moist and clean, they have also a decidedly protective effect against bacteria as shown by Alexander Fleming (*Lancet*, Feb. 2, 1929, p. 217), who proved that the lipozymic concentration in tears was over 200 times that of blood serum of the same person. The action of tears is elective but greater than weak antiseptics.

Aside from their possible biologic usefulness in situations of painful conflict we know little about why tears are secreted. We may observe, however, that not all people secrete tears on emotion, that the quantity varies, and that ideas are as effective as real situations in causing the emotional disturbances.

The effect of emotion on other gland secretions may be exactly the opposite from the effect on the lachrymal secretion. For instance, digestive secretions such as the saliva, gastric juice and others are diminished to a greater or less extent. We note that while the effect on any secretion varies in degree in different individuals the direction of the effect, *i. e.*, stimulation or inhibition is the same in all cases.

So far as I have been able to observe, the effect of emotion on the thyroid gland secretion is always stimulating or at least has that tendency. The degree of stimulation depends on a constitutional peculiarity of the individual just as in the case of the tears. This state of irritability may be temporary and due to some special factor, but more often it seems to be a permanent tendency.

However that may be, the directly exciting cause of the over secretion is the presence of the emotional conflict and so long as the conflict endures the over secretion will continue. It is often stated that emotional effects may be the continuing effects of a single "shock." My experience contradicts this. Whenever I have found continuing emotional effect, a careful psychoanalysis has shown that there was a continuing emotional conflict, *i. e.*, an inability to adapt to the situation. This is often strenuously denied by the patient at first, but is admitted after the facts are pointed out to them. This difference in point of view may be illustrated by referring to a case reported by Hans Curschmann (*Deut. med. Wochenschr.*, Jan. 1, 1926, S. 9). His patient was a single girl, age twenty-four years, "intelligent and socially prominent," who gave birth to a baby. This was followed by vomiting, loss of weight, tremor, mental symptoms, sweating and tachycardia. The hair fell out, Loewy's sign was present, there was a leucopenia and the basal metabolism was plus forty-one. He makes a diagnosis of hyperthyroidism the result of "severe mental insult." It would be my opinion that the hyperthyroidism is part of a continuing mental conflict, *i. e.*, an inability to adapt to the situation in which she finds herself so that the thyroid is continually stimulated. Many similar cases have come under my observation. It is not the situation of itself that causes the trouble; it is the patient's reaction to the situation. It is due to their previous training and ideas concerning such situations. Immediately their ideas are changed or they make some other satisfactory adjustment the symptoms disappear.

Rest, isolation, iodine medication and even surgical operation may be necessary in some of these cases, but the real cause cannot be eliminated that way.

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar March 6, 1931)

MEDICAL CASES

John H. Greist, M.D.
Joseph D. Coate, M.D.

Dr. John H. Greist: The first medical case we wish to present is so ill he could not be brought to the auditorium. The patient, a white male, aged twenty-three, was admitted to the hospital for the first time December 13, 1930, complaining of epileptic seizures over a period of four years and of partial paralysis and deformity of the left hand and arm. In 1923, while working in a stone quarry in Bedford, he was struck by a falling piece of stone, sustaining a depressed fracture in the right parietal region of the skull. That evening a decompression was done and a piece of bone about 3½x4 inches removed. After six days of unconsciousness he made an uneventful recovery except for a residual paralysis of the left arm and hand. He remained in this condition until November, 1926, when he had a convulsion lasting about an hour in which there was twitching of the left arm and leg throughout the course of the convulsion. From that time until admission to the hospital he experienced a number of these convulsions of varying severity at intervals of a few days to a month.

In June, 1929, a bone transplant was performed at the Methodist Hospital to cover the area of the decompression. This gave him complete relief

until in September of 1930 when the attacks began to return.

His past history was irrelevant except for a non-productive cough present for two years prior to admission and some loss of weight in the year prior to admission. In going over the history by systems the presence of a gastro-intestinal disturbance of about a year's duration was elicited but not given much emphasis. He complained of belching sour material, of vomiting occasionally after meals, and of having a pain in the region of the stomach almost continuously. This pain was made worse by food and was frequently severe enough to waken him at night. No bloody or tarry stools were noted.

His mother had been tuberculous for a number of years and for one year prior to his admission had been in bed with a tuberculosis of the bone. The remaining family history was irrelevant.

After physical examination and laboratory study a tentative diagnosis was made of Jacksonian epilepsy, spastic paralysis of the left arm and hand, possible peptic ulcer, and possible pulmonary tuberculosis.

While in the hospital he experienced a number of convulsions and, x-ray examination of the skull revealing that the bone graft done in June, 1929, had been reabsorbed, a bone flap operation was performed on December 30th, to cover again the area exposed at the decompression. His post-operative recovery was uneventful, only one convulsion occurring after the return from surgery. He was discharged on January 14th.

On February 15th he was readmitted to the hospital complaining of vomiting, diarrhea, inability to tolerate any food but malted milk, pain in the abdomen, and loss of twenty pounds' weight in one month. The pain was not relieved by food or alkalies; vomiting alone gave relief. This condition had an onset with intermittent attacks several days following his discharge from the hospital and became constant on February 12th.

On physical examination the findings in the chest which had been suspicious for tuberculosis on the first admission were definite; there was dullness on percussion over the upper left chest, increased fremitus, and occasional rales. There was tenderness throughout the abdomen, more marked on the right, and palpation revealed considerable rigidity of the right rectus muscle. No masses were palpated.

Urine analysis was negative save for the presence of large numbers of bacteria. Hematology was normal save for a white count of 12,000 and an increase in the lymphocyte count to thirty percent. The Widal reaction was negative. Acid fast bacilli were isolated from the sputum and from the stools on several occasions. X-ray examination of the chest was typical for tuberculosis and suspicious for cavitation in the left upper lobe. Examination of the gastro-intestinal tract following a barium meal showed excessive motility. A large part of the barium emptied from the colon in six hours and the bowel was clean in twenty-four hours.

The present condition has been diagnosed as one of pulmonary tuberculosis and tuberculous enteritis. The treatment has consisted of absolute rest, a low residue diet high in protein and low in carbohydrate, and astringent medication in an effort to relieve the diarrhea. Ultra violet light which would be indicated in the treatment of the enteritis has not been used because of the active pulmonary lesion. Under this management there has been a slight improvement so that he is no longer vomiting all food taken and there is apparently some decrease in the diarrhea. The temperature, however, has continued to run a hectic curve and the prognosis is guarded.

This case has been presented as one in which two entities have been present at the same time, and as an example of the danger of not giving sufficient attention to following up the diagnostic leads given by what may appear to be minor complaints. While the tubercular involvement in this case is so extensive that the eventual outcome would have been the same, nevertheless his treatment might have been more rational if the diagnosis had been established definitely earlier.

Joseph D. Coate, M.D.: This case is being presented as an exfoliative dermatitis resulting from anti-luetic treatment with neo-arsphenamine. Quoting Dr. H. M. Robinson:

"Dermatitides following administration of arsphenamine are encountered not infrequently. Many theories are advanced to explain the cause of arsphenamine dermatitis; chief among these are such factors as faulty elimination of the drug by the liver or by the kidneys; too large and too frequent individual dosage; the simultaneous administration of mercury or bismuth compounds preceding or accompanying arsphenamine therapy; and allergic instability or sensitization to the drug.

"The dose has no relation to the occurrence of post-arsphenamine dermatitis, which occurs as frequently after small as after large doses. This is particularly true of neo-arsphenamine.

"Generalized itching is the most important prodroma of the dermatitis, and suspension of, or care in, arsphenamine treatment of all patients complaining of itching will reduce markedly the incidence of severe reaction. Extravasation of arsphenamine into the tissues does not seem to be a predisposing factor of dermatitis.

"The average duration of the eruption in moderate cases is one week, whereas in the severe generalized exfoliative types the average duration is three and one-half weeks and perhaps longer."

This case, Mrs. M. O., age thirty-five years, entered the hospital January 31, 1931. Her chief complaints were: (1) marked swelling of entire body, (2) desquamating skin, and (3) severe itching. Previous history irrelevant; no children.

The patient does not know when she had initial lesion. The first treatment was given in November, 1930, and she received eight intravenous neo-arsphenamine treatments at weekly intervals. She had no skin eruption until following the last treatment on December 30th. That night she awakened with a severe itching of both arms. This itching increased until it covered the entire body. The first eruption was maculo-papular in type and rapidly

became vesicular. The day following the appearance of the eruption her face and legs became œdematous and this increased to a marked generalized œdema of the entire body. Generalized desquamation of the skin persisted for approximately four weeks.

On admission it was impossible to use any intravenous therapy, due to the marked œdema. The red blood count was 3,300,000; white blood count, 16,000; lymphocytes, 34 percent; polymorphs, 65 percent; eosinophiles, 1 percent. Urinalysis essentially negative. During the stay in the hospital the urine has shown traces of albumin frequently.

On February 11, 1931, the patient's temperature reached 103 degrees and she ran a hectic temperature for fifteen days. An abscess in the right gluteal region was noted and drained on February 22nd, and the temperature slowly came down to normal. Other complications were right otitis media, diarrhea, incontinence of feces, and conjunctivitis.

Treatment consisted of olive oil bath each day; colonic flushes; oral administration of sodium thiosulphate, and three intramuscular injections of sodium thiosulphate.

The patient has improved markedly during the past ten days. It is the general opinion that further treatment with arsenical preparations should not be administered, but instead iodides and perhaps bismuth and mercury should be resorted to in the further anti-luetic treatment of the case.

SURGICAL CASE

Jack E. Pilcher, M.D.

This patient entered the hospital two days ago complaining of dropping of the soft tissues of the face, with recurring attacks of pain. There are solid tumors to be palpated in each cheek. There is one that can be seen easily, and there are one or two on the side of the forehead. These tumors are due to paraffin injections. Twelve years ago the patient paid almost $700 to have paraffin put in her face. She immediately had a thrombus in the left temporal region and was extremely ill. She got over that in about two months. She had something that is common following injections of paraffin—a generalized swelling, marked pain, high temperature—and since that time she has had recurrent attacks. Paraffinoma is not new. It occurs in nearly every case of these injections. It is done as a plastic measure, but the end results make the person hideous rather than improve the looks.

Our plan is to remove these tumors by sharp dissection, then do a muscle lifting of the face. Removal of the tumors will not do away with the lax tissues.

These tumors after a time have a characteristic structure. There is a generalized fibrosis about the mass of paraffin, growing downward into the paraffin of a network of fibrous tissue. Another explanation is that the peculiar arrangement is due to the fact that at the original injection the paraffin followed the line of least resistance. But paraffin injections have been dropped, from all we can find. We looked through the Cumulative Index since 1920, and while there are several articles in both German and French, not one was favorable to this method of treatment; they all had bad results. It is true that certain cases react more favorably than others. Some, like this woman, merely have paraffin tumors, while others will have true carcinoma developing over the site of injection, and there is also a type of benign tumor that follows the lymph stream, but from all we find the nodes otherwise do not seem to be malignant. There are a few men who use this treatment in case of depression of the bridge of the nose, but even there you may get a blocking of the venous or lymph stream and a hideous deformity, and it has been known to cause thrombosis and loss of eyesight. So in general injections of paraffin have been dropped by the medical profession. There are still several beauty cults that do it, and that is where most of the cases are coming from now.

We do not have any hopes of improving this woman very much because these tumors cannot be shelled out; they have to be cut out with sharp dissection, and that will leave this lax tissue that will have to be attacked in some way.

ORTHOPEDIC CASES

George J. Garceau, M.D.

I want to try to make interesting two very uninteresting cases. I do not know that I will succeed. We have two boys here, one thirteen and one fourteen. Both are suffering from Potts' disease.

Jack's condition began approximately five years ago with a very peculiar lesion in the lumbar spine. At first it was believed to be a cyst on one of the bodies of the vertebra, but as it progressed it took on the appearance of Potts' disease. Some time ago he was observed in the out-patient clinic, when it was noticed that he was developing contraction of the ankles and hips, and that there was spasticity present from the level of the umbilicus down. For this reason he was placed on a Whitman frame. The frame is made out of gas-pipe, narrow in the middle and curved so as to produce extension. Then casts were applied to the legs to correct the marked equinus which had occurred and also to reduce flexion of the hips and knees. He has a small kyphosis that barely fits the palm of the hand. He is supposed to lie on the frame with the kyphosis above the rise of the frame. The reason for that is to produce extension of the kyphosis.

This other boy is fourteen years old, and gives a history of having suffered from tuberculosis since he was five years old. He had some sort of treat-

ment, probably ambulatory. When he came to the hospital several months ago he was in this condition. Most of the students have seen him. As you can see, he has a marked kyphosis, and he has on the feet and the knees atrophic ulcers. On several occasions we have tried to straighten his legs but have always failed because he cannot stand pressure of any kind. The skin breaks down and it takes weeks to heal it. We have tried every method imaginable. I suppose if we could hang him up in the air and put some kind of traction on that would not touch him we might succeed. The x-rays of this boy are not good because we cannot get him in position to take x-rays very well. Here you see marked destruction, a large abscess, calcification, and then rotation of the vertebra. In the other boy (thirteen) we have a different type. The vertebræ involved are the fifth and fourth lumbar. It is a rather atypical appearance. You have a collapse, a partial anterior slipping of the fifth, and partial destruction of the fourth. The fifth is a half inch anterior to where it belongs.

This condition of paraplegia, or paralysis due to Pott's disease, is a rather frequent thing. The paralysis that comes on rapidly and early in the course of the disease is usually amenable to treatment. This paralysis is generally caused by a kinking of the cord, a swelling of the cord, or an abscess which invades the canal in the periphery. This abscess may be very minute and contain very little material, but still cause paralysis due to pressure.

Under conservative treatment this type of case recovers. We have several ways of treating these cases. First, they should be placed on a frame of some kind, a Whitman or a Bradford. If there is a tendency for the kyphosis to increase, a Whitman frame with a moderate amount of curvature should be applied. Of course if there is much kyphosis you cannot put them on a Whitman frame; they will not tolerate it. Then you should prevent contracture of hips, knees and ankles by casts and traction splints. If there is abscess, and most of them are in front and lateral to the spine, then it is possible to aspirate if we get them early. If you wait until there is calcification, of course it is too late. If there is swelling of the cord due to inflammatory processes, rest is all they need; they will recover under that treatment in a few weeks or a few months. We have seen cases of Potts' paraplegia recover materially in two weeks, although those cases are rare. Jack probably had abscesses plus kinking. Early that would have been amenable to treatment. Ralph, I am not certain. He certainly has paralysis. Although the kyphosis is not large, it seems to me the slipping might be responsible for some paralysis. On the other hand, at some time during the fall he ran a high temperature and had chills, at which time we thought he had a meningitis, an inflammation of the membranes around the cord—a pachymeningitis. I am doubtful about that diagnosis. I am inclined to believe he had a beginning paraplegia due to kinking and to cord swelling. The temperature remains unexplained in my opinion.

As to the treatment of pachymeningitis, of course there is not much to do. If you have a kinking and are pretty sure the paraplegia is caused by the kyphosis, then a laminectomy is indicated, but I have a feeling that the only indication for laminectomy in Potts' paraplegia is kinking and slipping of the vertebræ, or pressure on the cord. Most of these cases are not good surgical risks to begin with. The French have done a great deal of work on this condition and they treat it conservatively. They describe other surgical methods and a device for draining the abscess, such as removal of the ribs. So far we think aspiration is the best method of emptying these abscesses, that there is less danger of sinus formation. You know if you open one of these abscesses with drainage you are bound to get secondary infection, and then pyogenic invasion plus the tuberculous process.

The reason I present these two boys is because one of them shows the result of ambulatory haphazard treatment. The general condition is pretty good. He has a pretty good color and is perfectly happy, eats well, and is in pretty good condition. The other boy has improved markedly and seems to be recovering from his paraplegia.

PEDIATRIC CASES

Herbert F. Call, M.D.

In presenting the following two cases of miliary tuberculosis it seems best first to present the family history, as it so aptly demonstrates the significance of a contact tuberculosis history. The two cases I wish to present are brother and sister, so we can deal with their family history as one.

The paternal grandfather, aged sixty-two, is living and well. He has always had robust health. He has two brothers living and well; no brothers or sisters dead.

The paternal grandmother, aged sixty, has complained of pleurisy intermittently for the past five years. She also suffers from high blood pressure. Her family physician suspects lung pathology. She has two brothers, both living and well. No other brothers or sisters.

Of this union there were four children; three are living and well. The fourth, the father of the two children to be presented, became ill in October, 1930, at which time a diagnosis of pneumonia was made. His illness ran a protracted course, and in the middle of December, 1930, he developed a meningitis characterized by the family physician as being "not of the infectious kind." He died December 29, 1930.

The maternal grandfather, aged sixty-two, has had multiple tuberculosis of the bone for the past eight years. He has two brothers and three sisters living and well; one brother and one sister died of high blood pressure.

The maternal grandmother is continually ill. No definite diagnosis has been made, although pulmonary tuberculosis is suspected. She has one brother and two sisters living and well; one sister and one brother died of pulmonary tuberculosis; one brother went insane.

Of this marriage there are five girls, four of whom are living and well; the fifth, the mother of the patients, is an open case of pulmonary tuberculosis of one year's duration, according to the physician's statement.

The mother and father of the patients, as well as the patients themselves, have always lived with the maternal grandparents.

Kenneth, the oldest child, aged six, was admitted to the Riley Hospital on February 17, 1931, complaining of pain in the abdomen, constipation, projectile vomiting, and stiffness of the neck. His symptoms began as a simple, acute coryza in the middle of December, 1930, at which time his sister, the only other child, also developed the above complaint. This was two weeks prior to the death of their father, who at the time of his death exhibited meningeal symptoms. The sister, Alberta, at this time also developed a bilateral otitis media, both ear drums rupturing and discharging thin, greyish pus. Kenneth became rapidly worse, his temperature mounted, and he complained of a sore throat and rheumatic pains in all his joints. Ten days prior to admission he began vomiting, complained of pains in the abdomen, stiffness of the neck, hyperæsthesia, and two days prior to admission developed an anuria. His temperature was typically typhoid in type and he was admitted to our institution as such.

On admission physical examination revealed the neck to be stiff, Kernig's sign positive, Babinski's sign positive, reflexes slightly hyperactive, respiration rapid, and a marked hyperæsthesia. A spinal puncture was immediately done. The fluid was under increased pressure. The cell count was 950. The fluid developed a pellicle on standing, and an acid fast stain of the pellicle revealed the presence of tubercle bacillus. The urine has some pus cells and red cells present. A spinal puncture the following day gave exactly the same findings except that the cell count had risen to 1,300. The patient went steadily down hill and died on February 25, 1931. An autopsy was done, at which time a miliary tuberculosis was discovered which involved the meninges, lungs, liver, spleen, kidneys and lymph nodes.

Alberta, aged three, entered the hospital on the date of her brother's death, complaining of upper respiratory infection, bilateral otitis media, temperature and chills, and productive cough. Her illness began at the same time as her brother's. Her temperature had been mounting steadily. She was complaining of headaches. Physical examination at this time revealed the following: Bilateral otitis media, both ears discharging thin, greyish pus; rapid respiration and productive cough; numerous moist rales, more in the left chest; the chest is negative on percussion; the liver is enlarged slightly, and the spleen palpable; reflexes normal; more or less hyperæsthesia. The patient is running a temperature typhoid in type, as high as 103-104 degrees. Acid fast stains of the sputum and pus obtained from discharging ears have not as yet revealed the presence of the tubercle bacillus. X-rays of the chest present the typical snow-cloud picture of miliary tuberculosis.

DIAGNOSIS AND TREATMENT OF CARDIAC DISEASE

G. S. Bond, M.D.

It is not my purpose to discuss with you in any sense what the subject of this paper would be supposed to represent, but I thought it probably would be interesting to go into that transitory field of advancing thought that has to do with the diagnosis and treatment of heart disease, discussing perhaps one or two phases of subjects on which opinions are changing, where we are getting away a little bit from the old organized thought and going over into a contradictory conception of certain portions of this subject. Time will only allow me to take two or three of these phases this evening.

The first one I want to discuss is so-called bundle branch block. In order to make it clear let me go back to the beginning of what we mean by bundle branch block, or as it is sometimes called, intraventricular block, or interventricular block. Prior to the advent of the electrocardiograph we had no knowledge that there was such a thing as bundle block between one ventricle and another. The experimental work up to that time had shown that mechanically the two ventricles contract simultaneously. It was only with the advent of the electrocardiograph that we were able to see that the very rapid changes that take place can occur independently, first in one ventricle and that followed by the other. In those cases where we demonstrate interventricular block electrically we are unable to demonstrate mechanical asynchronism between the two sides of the heart. The reason for interventricular block is rather obvious when we go back to the physiology of the two ventricles. Our stimulus passes across into the septum, divides and goes down into the papillary systems of the two ventricles, spreads over the internal muscular mechanism of the heart. That a stimulus carried across there we have known for a long time can be blocked at the auriculoventricular junction and you get a typical auriculoventricular block. If that is possible then there is no reason why you cannot have that bundle blocked in the same way. The stimulus can pass across from auricle to ventricle, it can reach one ventricular prior to the other, and it can reach one ventricle to the exclusion of the other, and that difference is known as bundle branch block. It can only be demonstrated by the electrocardio-

graph. We know that these ectopic beats originate in that ventricular muscle and from there spread out over the remaining portion of the muscle and therefore we have the extrasystole contraction, a running wave, a contraction from one side of the heart to the other. Eppinger's conclusion was that we were dealing with a stimulus from the auricle passing down to the ventricle, but it did not reach both ventricles simultaneously; that reaching one side it apparently had to pass around the other ventricle as a wave of contraction. His natural conception was that in case of bundle branch block the stimulus passed through one bundle, then through the musculature to the other side of the heart. That wave is so rapid that you cannot prove the mechanical asynchronism of the two sides, but the electric wave runs from one ventricle to the other. That was the original Eppinger lesion. Since then we have determined that there can be partial bundle branch block; that instead of complete occlusion there can be partial occlusion, a narrowing of the bundle in such a way that the stimulus will not go through completely, or that it reaches one side later than the other, and that none of the succeeding stimuli reach that side at all. In other words, you can have two forms of bundle branch block, in one of which the stimulus goes down both sides but one faster than the other, giving you a mixed figure. That lesion has been considered, because it occurs in all cases of advanced disease of the heart, such as arteriosclerosis, the advanced fibrosis of old age, the extreme phases that occur in older people after coronary occlusion so frequently very serious. When we found the electrocardiograms representing bundle branch block we assumed, up until the past year, that it was serious disease of the heart muscle, and that the finding of the bundle block was synonymous with critical heart lesion. In the past year that conception has changed. There have been three or four articles written showing that there can be temporary bundle branch block. Typical pictures of this are the cases of block which disappears after a period of time. These lesions usually have existed in the acute infectious diseases such as pneumonia, where not infrequently bundle branch block will develop and last a few weeks or months and then disappear. So the first change of opinion before you would be temporary bundle branch block in an apparently otherwise normal muscle. That is conceivable inasmuch as we know that complete heart block occurring at that point can be either permanent or temporary, and in consequence we might just as well have bundle branch block temporary as permanent.

The second change of opinion is following the work of White last year, in which he reported bundle branch block occurring in individuals that were apparently healthy otherwise. Paul White of Boston collected a series of twenty-five cases in which the individual was apparently healthy otherwise. Some showed symptoms of tachycardia, but there was no evidence of other lesion except the bundle branch block.

I would like to speak of the question of heart block as it occurs in diphtheria, and the relationship of digitalis in the treatment of diphtheria. Two or three articles have been written on that in the past year. Heart block only infrequently develops in diphtheria, but when it does it is very serious. All the patients in the series reported died when block developed. Heart block developed in these cases so frequently subsequent to the use of digitalis that the question was whether the block was not due to digitalis. It is striking evidence of the contraindication of the use of digitalis in the treatment of patients with heart failure in diphtheria. The toxic degeneration taking place reacted to digitalis in such a way that block developed and the patients died.

The second phase of the subject that I wish to discuss briefly, and in which there has been a definite change of opinion, is that of endocarditis. I wish to speak of two forms: the rheumatic type and the subacute bacterial type. Rheumatic endocarditis is a definite entity, not only from the standpoint of the endocarditis itself but the things that occur subsequently, but the whole thing is considered as one in cardiology. It is simply the process of valvular heart disease that originates with endocarditis and lasts throughout the lifetime of the individual. So rheumatic endocarditis means the whole chain of events until the valvular lesion develops.

Rheumatic endocarditis comes to the physician in one of four ways, especially in young people where we see so much of it. First, with the obvious evidences of rheumatism—general pains, loss of weight, fever, leg-ache and things of that sort, and finally evidence of endocarditis developing along with the rest of the picture. Second, cases of acute tonsillitis, repeated attacks, with maybe a few pains and aches but not highly localized; no chorea, just the tonsillitis. Third, those groups of individuals who have had chorea and rheumatism for years, who come to the physician as definite cases of endocarditis, the heart picture is present, the tachycardia, shortness of breath, etc. And fourth, a group which is manifesting itself more in recent years, and here again I wish to emphasize a changing trend. A symposium on this subject was published in the *British Medical Journal* last year in which one or two French writers emphasized strongly that at least one-third of the patients coming to the clinics (children with advanced valvular disease and evidence of rheumatic endocarditis) showed no history of any rheumatism, chorea, and many times no tonsillitis, so the rheumatic phase, the chorea phase, the tonsillar phase, are not necessarily a part of the endocarditis which produces this valvular lesion, but they develop as masked symptoms. We are beginning to perceive that phase in the last year or two.

Rheumatic endocarditis follows a certain definite train of events after endocarditis, namely, the development of mitral valvular lesions, a mitral stenosis primarily and a mitral insufficiency secondarily. Another thought which has been advanced, and two series of cases have been reported in the past year, is this: We have been accustomed to think that tricuspid stenosis is rare. It occurs frequently as a secondary complication, but primary tricuspid stenosis is rare. From the findings in the past two years it is beginning to be obvious that tricuspid stenosis is not as infrequent as we think, and in a series of 300 cases of mitral stenosis of long standing twenty-three cases were reported of obvious stenosis of the tricuspid valve. It is not to the degree that we think of mitral stenosis, but it is a definite narrowing. Associated with this tricuspid stenosis is a mitral stenosis the physical sign which emphasizes the difference being a cyanosis without dyspnœa. In other words, tricuspid stenosis is a safety valve for a congestion in the chest resulting from mitral stenosis.

The third feature of this condition on which opinions are changing in the last two years is that formerly tonsillectomy for rheumatism, chorea, endocarditis, has been practically obligatory; we thought it was the thing to do. There have been a half-dozen articles written the past year, one by a commission studying the subject in thousands of children, and their conclusion was this: First, that tonsillectomy prior to any tonsillitis, to any rheumatism, chorea or endocarditis, does limit the number of cases, when carefully controlled, of these diseases following; tonsillectomy performed after rheumatism, chorea and endocarditis have developed, does not diminish appreciably recurring attacks of these three diseases, in the whole group. In the younger groups it does. In other words, the child who develops rheumatism early in life, at six or eight years of age, and has a tonsillectomy following—a higher proportion have no recurrence than in the control group. In children from fourteen to sixteen who have a tonsillectomy following the first attack of rheumatism, chorea or endocarditis, there is practically no difference in the recurrence between them and the children who do not have a tonsillectomy. So a tonsillectomy following endocarditis, rheumatism or chorea at that age does not hold out the possibility of preventing a recurrence of these diseases.

The last phase of rheumatic endocarditis is the question of treatment. That has been very unsatisfactory up to the present time, namely, the stopping of the chorea or rheumatism to prevent a recurrence. There have been two possibilities advanced in the last year. One, the French, emphasizes the treatment of these cases by intravenous salicylates in large doses. They claim absolutely curative results, the prevention of recurrence, by that treatment. The American group that answered them say that the dangers connected with the intravenous salicylates, the effect on the function of the heart, overshadows the use of them, and that consequently at the present time it should not be done. The French writers emphasize so strongly the benefits that it is questionable whether it should not be tried.

Another thing with which we have been attempting to experiment here is the use of x-ray therapy over the precordium and spleen. Levy and others reported cases of apparent cure a year ago. We have been attempting it, but cannot say anything definite at this time, although it looks as if in some cases we do get a cessation of symptoms for at least eight months or a year in those children who have had temperature prior to the time of treatment.

These are the new things in the treatment of rheumatic endocarditis. Other methods have been of little avail—salicylates, alkalies, rest in bed—the child tends to revert as soon as he is active. Consequently, unless someone does give us some other remedy, we do not have as yet any treatment, if we cannot cure the infection that apparently produces the rheumatic group.

THE CAROTID BULB AND THE SINUS REFLEXES OF H. E. HERRING*

(The complete title of the article is "Untersuchungen uber den Bulbus carotidis Bei Mensch und Tier in Hinblick auf de "Sinusreflexe" nach H. E. Herring; ein Vergleich mit anderen Gefaszstrecken; die Histopathologie des Bulbus carotidis; das Glomus caroticum.)

J. A. Badertscher, M.D.

In 1923, H. E. Herring in experimenting with rabbits, dogs, and man, discovered that when pressure is exerted on the carotid artery in the region of its bifurcation, a reflex is elicited which results in bradycardia. A few workers regarded this reflex a result of a mechanical stimulation of the vagus, but Herring stated that this reflex was at times brought about in man by a pressure so light on this particular region that the vagus could not possibly have been involved.

Herring was then not familiar with any anatomical structure in that region which when stimulated by pressure should elicit a reflex resulting in a slowing of the heart beat. In looking through books of anatomy he came across the "sinus caroticus", which is a term representing an enlargement of the internal carotid artery in the region of its origin from the common carotid artery. The author calls this enlargement by the more appropriate term "carotid bulb." Thinking that this enlargement might be a possible starting point of this reflex, Herring, in 1924, after experimenting with a large dog, found this to be correct. He then performed a large number of experiments, modified in different ways, and found that by stimulating the wall of the carotid bulb two re-

*By Paul Sunder-Plassmann, *Zeitschrift dur Anatomie und Entwicklungsgeschichte*, Vol. 93, 1930, pp. 567-622. Reviewed by J. A. Badertscher: Anatomischen Anstalt der Westfoelischen Wilhelms-Universitat zu Muenster, Westfalen.)

flexes were elicited, namely, bradycardia, and an arterial hypotonia, the blood pressure visibly drops. These reflexes resulting from a pressure on the carotid bulb are now often spoken of as the "Sinus Reflexes of H. E. Herring." Later he demonstrated that after blocking the cardioinhibitory nerves of the vagus with atropin or by section of the vagus, a stimulation of the carotid bulb still resulted in a fall of blood pressure while a lessening of the pulse rate did not occur, or only to a slight extent. Herring also found that the sinus reflex elicited on the right side is stronger than the reflex elicited on the left side, and that the vascular reflex in general plays a larger role and can be produced independent of the heart reflex. Later he found that the greater the blood pressure before the experiment, the greater was the fall of blood pressure during the experiment. He also found that the fall of blood pressure is more rapid following a heart reflex than it is when it follows a vascular reflex, but the latter is of longer duration. He believed that the sinus reflex is of the nature of a tonus for if the common carotid artery is compressed until the lumen is occluded, a rise in blood pressure and an increase in the pulse rate occur, due to the abolition of the "sinus reflex."

In searching for the centripetal path of this reflex he stimulated the superior cervical ganglion in the rabbit but the reflex was retained. Knowing that a depressor effect had been attributed to the glossopharyngeal nerve, he prepared the IX nerve in the dog and found that the first branch of the glossopharyngeal nerve after leaving the skull, goes to the carotid bulb. He then experimentally proved that this nerve carried the sinus reflex to the central nervous system. Herring calls this the sinus nerve. This nerve has since been called the ramus caroticus glossopharyngei, the ramus descendens glossopharyngei and the intercarotid nerve.

E. Hoch performed the carotid pressure experiment on two hundred and fifty patients. He would exert a moderately hard pressure for five to ten minutes and controlled the pulse frequently on the radial artery. He confirmed the findings of Herring that pressure exerted only on the carotid bulb would elicit the "sinus reflex."

The author states that the carotid bulb has been known to anatomists for some time. Gegenbauer in Vol. III of the eighth edition speaks of the Bulbus caroticus. In the "Anatomie des Menchen" Merkel in the sixth edition also speaks of it. Not all atlases of anatomy represent it, *e. g.*, it is not represented in the Handatlas of Spalteholz. (I have not been able to find it in any of the more widely used, present-day textbooks of anatomy.—J. A. B.)

Binswanger, in 1879, carefully studied the location of this dilatation and found that it may be located: first, entirely on the internal carotid artery close to the bifurcation of the common carotid artery; second, it may be found on the level of the bifurcation but extends a considerable distance onto the internal carotid artery to which it mainly belongs; and, third, it may be found on the level of the bifurcation and belong mainly to the common carotid artery.

The carotid bulb is also present in the dog, rabbit, cat, monkey and horse. Ruminants have no internal carotid artery. In them the common carotid artery divides into three branches, one of which is the occipital artery and which is one of the main arteries supplying the brain with blood. Near its origin from the common carotid artery is a dilatation—the bulbus arteriosis—that is specific and constant for the occipital artery and it compares in microscopical structure with that of the carotid bulb in man.

Various workers regarded the carotid bulb as a pathological structure. L. Meyer claims that the dilatation at the beginning of the internal carotid artery may become so large that it will interfere with the cerebral circulation. Schaefer regarded the dilatation as an aneurism. Konig was familiar with these "spontaneous" aneurisms of the carotid which are generally found at the bifurcation of the common carotid artery, and in healthy individuals observed a dilation scarcely large enough to be called an aneurism.

Herring since 1924 constantly maintained that the carotid bulb is not a pathological but a normal condition of the internal carotid artery. The author also found the carotid bulb in its various forms in the cadavers of adult persons of various ages and in children.

The author thinks that the anatomical basis for the so-called sinus reflex lies in the peculiar structure of the wall of the carotid bulb. The wall of the bulb is thinner than the wall of the internal carotid artery above or the wall of the common carotid artery below the bulb. The thinness of the bulb wall is due entirely to a greatly thinned media. The thickness of the media above the bulb is 0.45 mm., below the bulb in the common carotid it is 0.6 mm., and in the bulb it is 0.2 mm. thick. The intima is slightly thicker, and the external elastic membrane is considerably thicker in the bulb than they are above or below the bulb. The greater thickness of the intima is due to a large number of elastic fibers in the subendothelial layer. The wall of the bulb is, therefore, in general, more elastic than the wall of the arteries above or below the bulb.

The nervous elements of the bulb are located in the adventitia and are constituted of a rather close-meshed net composed of nerve fibers arranged singly and in bundles which vary in size. Both medullated and non-medullated fibers are present. The nerve fibers that come off from the bundle of fibers are often peculiar in that along the course of the fiber the neurofibrillæ become loosely arranged, forming a slight enlargement. Several of these enlargements may be found along the course of a single fiber before it finally terminates in an irregularly shaped nervous end-apparatus composed of a loose arrangement or net of the neuro-

fibrillæ of that fiber. Some of these end-apparatuses are found in very close relation to connective tissue cells. There are two types of nervous end-apparatuses. In type I a small bundle of fibers breaks up into its constituent fibers which terminate in nets of neurofibrillæ not far from the bundle of fibers whence they came. This type of ending covers less territory than type II in which the nerve fibers break up into their endings a considerable distance from the bundle from which the nerve fiber separated. The type II ending he also calls the diffuse type of ending.

In the wall of the carotid bulb in man the nervous end-apparatuses of type I are most numerous, while in the carotid bulb of the dog, rabbit and cat, those endings belonging to type II are most numerous. In the arterial bulb of the occipital artery in the ox, the type II endings are quite numerous.

The nervous mechanism of the carotid bulb is located in the adventitia. The nervous end-apparatuses are regarded as the receptors for the sinus reflex. The suitable stimulus for the receptors seems to be a pressure stimulus. Since the wall of the carotid bulb is of a greater elastic character than the wall of the artery above or below the bulb, its structure seems to be particularly adapted to convey a pressure stimulus to the receptors located in the adventitia of the bulb.

The wall of the bulb is also much more vascular than the wall of the arteries above or below the bulb. The author thinks that there is a possible functional relationship between this vascularity and the releasing mechanism of the sinus reflex.

The nerve endings that were described are sensory endings, and are morphologically different from any nerve endings yet described. Up to the present time the author has examined the carotid artery above and below the bulb, the aortic arch, and parts of the femoral artery, but has not found anything in the nervous tissue accompanying these vessels that corresponds to the nervous apparatus in the adventitia of the carotid bulb.

The pathological histology of the carotid bulb and its relation to the sinus reflex, and practical considerations:

The author in examining sections of pathological material of the carotid bulb found that an atheromatous or an arteriosclerotic condition was present in the wall of a relatively large number of carotid bulbs. These pathological conditions in the bulb were often present to a marked degree before they could be detected at all, or only to a slight degree in other blood vessels. In searching through the literature he found that L. Meyer had made excellent observations concerning this. Meyer gave a valuable protocol of thirty-one sections of the internal carotid artery taken from young individuals ranging from nineteen, twenty, twenty-three to thirty-two and forty-two years in age, and in whom the blood vessels were, in general, normal. In the internal carotid arteries taken from these individuals he ascertained a sharp change which he described as a relatively abundant and diffuse calcification. This change is described as anular in shape and its location as beginning at the origin of the internal carotid artery and extending upward for from eight to ten millimeters. This change begins and ends abruptly and clothes the internal carotid artery at its origin with a firm, smooth ring.

The author then goes on: Although the etiology of arteriosclerosis is not clear, one is entitled to assume that its most favorable place ("Lieblingssitz") is in the carotid bulb, that there are factors other than purely physical ones that cause a pathological change in this small piece of blood vessel and its early or premature beginning may be sought in a particular constitutional condition.

The specific structure of the carotid bulb, manifested in the thinness of its wall, its fusiform shape, its elasticity, which the blood wave from the heart reaches with almost undiminished force, may constitute the underlying condition in which atheroma may develop luxuriantly.

The author examined a pathological carotid bulb of a woman sixty-one years old. The wall of the entire bulb felt like a perfectly rigid tube. It is known that atheromatosis is a disease of the intima. The intima was thickened appreciably, in the middle entirely calcified, and infiltrated toward the media. An adequate stimulus for the release of the sinus reflex is the distension of the wall of the carotid bulb which is brought about by the blood wave after each systole. On account of the absolute rigidity of the bulb, and considering the fact that the rigidity is a condition of the intima, it is impossible to think of a distension of the tube. The nerve endings, located in the adventitia, are no longer stimulated by the systole. The sinus reflex accordingly drops out. Since it is a fundamental biological law that through disuse an organ atrophies, the author was prompted to determine to what degree the nerve endings were affected in the bulb in advanced stages of atheroma. He expected to find them degenerated, but this was not the case. The nerve receptors for the sinus reflex were perfect in every detail. As was said the physiological apparatus for the liberation of nervous energy was silenced, due to the rigidity of the bulb wall. This also was the case to a greater or less degree in a few advanced stages of arteriosclerosis. The blood wave after each systole, on account of the rigidity of the wall of the bulb, no longer fully distended the arterial wall to stimulate the nerve receptors. The "sinus reflexes" are, so to speak, blocked.

As Herring ascertained, the sinus reflexes are tonic in their nature. In the atheromatous this tonic drops out. It is to be expected that these patients circulatory disturbances will become manifest. Indeed, the symptom complex characteristic of arteriosclerosis is preponderately headache, vertigo and high blood pressure, and surely is in part a sequel to the disappearance of the sinus reflex, which above all else is a regulatory mechanism for the cerebral blood circulation. The author be-

lieves that one does not go wrong in assuming that the very many cases of apoplexy that the physician meets in his practice are at least to a great extent a sequence of the loss of the sinus reflex which normally, above all else, is concerned with the prevention of an abnormally high blood pressure in the brain. This view is all the more plausible since in general arteriosclerosis the carotid bulb is always particularly affected and the first pathological conditions appear first in the bulb while the remainder of the vascular system is still intact.

From what was said above, and what the author's investigation proved, the nerve receptors of the bulb remain intact in advanced stages of atheromatosis. It then follows that if the receptors remain intact they may be stimulated artificially even though they are no longer stimulated in a physiological way.

Herring and Koch have found that in arteriosclerotic patients even a light pressure on the carotid bulb is followed by an enormous action, resulting in a fall of blood pressure and a slowing of the rate of the heart beat. The author personally convinced himself of this effect. Since the completely intact nervous apparatus in the adventitia is, by the pressure experiment, pressed against the hard, calcareous plate of the intima, the nerve endings will be much more greatly stimulated than when, in the normal condition, they are pressed against the lumen of the blood vessel wall against no resistance.

The pressure experiment confirms the assumption that in healthy individuals an appreciably strong pressure must be applied to elicit the sinus reflex, while in arteriosclerotic patients only a slight pressure is necessary.

L. Meyer and the author himself demonstrated that the atheromatous process of the carotid bulb appear in different forms, namely, as an infiltration, an ulcer and cicatrix, a calcified thickening and unevenness, and sometimes as a symmetrical or asymmetrical appearing constriction of the arterial lumen, etc. It may not be superfluous to indicate that through careless investigation or pressure on the carotid bulb it is always possible, depending on the pathological condition of the arterial wall, to detach a thrombus which, carried by the blood stream, may produce a cerebral embolism; also it is not impossible to rupture a strongly diseased bulb, a fact which already L. Meyer and Esmark through their investigation of carotid aneurisms warned against.

While it is proved that even in advanced cases of arteriosclerosis, the nervous receptor apparatus in the adventitia of the carotid bulb remains intact, the author further proved that in old age this apparatus undergoes senile atrophy. This atrophy is not a sequence of arteriosclerosis but a manifestation of a general senile involution. This was made clear when this apparatus was found atrophied in the carotid bulb of individuals over eighty years old and in whom arteriosclerosis of the bulb had not advanced farther than in individuals from forty to sixty years old and in whom this apparatus was still intact. It is clear that atrophied nerves are no longer functional, and the author believes firmly that a part of the maladies of old age ("Altersbeschwerden"), not including arteriosclerosis, are traceable to the dropping out of the sinus reflex, which through tonic reflexes constantly takes care of a uniform cerebral circulation in the healthy condition.

SPECIAL ARTICLE

DIPHTHERIA IN INDIANA IN 1931 FEBRUARY

We are very glad to report that February diphtheria deaths fell much below expectations, there being but nine for the entire state. In the corresponding month last year there were nineteen. As a result, in spite of an increase in January of this year over January of last year, we are four deaths under the 1930 figures for the first two months of the year. A peculiar thing for February is the fact that no county had more than one death. It indicates that, while the condition is rather widely spread in Indiana, there are no uncontrolled epidemics. The counties that have made bad records so far this year are Lake, Ripley, Dearborn and Fayette. Ripley with three deaths already this year has assured itself of a very high rate for the year. Attention is called to the fact that southeastern Indiana, which has been relatively free of diphtheria for a few years, is showing much the highest rates in the state. The following counties have already had a total of nine deaths during January and February: Ripley, 3; Dearborn, 2; Fayette, 2; Bartholomew, 1; Brown, 1. We are strongly inclined to think that this new focus is going to develop as the worst area for diphtheria for the next few months. Last year at this time the southwest corner of the state was showing higher rates, but these counties for the most part have cleared up.

Below are the counties representing deaths for the month of February:

	TOTAL FOR 1931	FEB.
Allen	1	1
Bartholomew	1	1
Brown	1	1
Carroll	1	0
Clark	1	1
Dearborn	2	0
Fayette	2	0
Gibson	1	0
Green	1	0
Henry	1	0
Howard	2	0
Huntington	1	0
LaGrange	1	0
Lake	5	1
Laporte	1	0
Lawrence	1	1
Madison	2	0
Marshall	1	0
Martin	1	1
Ripley	3	1
Starke	1	0
Vanderburgh	1	0
Vigo	1	1
	33	9

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EDITORIALS

PAROTID GLAND TUMORS

The subject of parotid gland tumors is very completely discussed in a recent issue of the *British Journal of Surgery* and *Surgery, Gynecology and Obstetrics*. The article in the British Journal comes from the Bland-Sutton Institute of Pathology and consequently deals more particularly with the pathological aspects of the subject. This article is a very complete discussion of the origin and type of cell composing tumors and is based on a study of fifty-five cases. The article in the American journal comes from the Massachusetts General Hospital and is based upon a study of 225 cases, taken from the records of this hospital. This article deals more particularly with the clinical aspects of parotid gland tumors, their treatment and prognosis.

Generally speaking, the authors of the two articles are in an argument on the main aspects of these tumors. There are two general types. One the encapsulated and the other the infiltrative type. It is agreed by both authors that recurrence may occur in both types, although the percentage of recurrence is much less in the encapsulated type. It is suggested by the British author, and he submits case records to prove his point, that the cause of recurrence in the encapsulated type may be due to a separate growth, small in size, which is overlooked at the primary operation. In other words multiple tumor masses may be present. It is agreed that the tumors may be extremely slow growing and appear benign in character for a long period of time and then suddenly take on the characteristic of malignancy, in which they grow rapidly.

Early surgical removal of parotid gland tumors is urged as the safest assurance of cure. If the tumor be encapsulated a prospect of cure is good. If it be of the infiltrative type the prospects are bad. Radium may be used as a preventive but not curative treatment.

THE LAST LEGISLATURE

We desire to call attention to the report of the Legislative Committee of the Indiana State Medical Association published in the Society Proceedings Department of this number of The Journal. It will be noted, according to the Committee's report, that so far as the physician in active practice is concerned his professional status is not changed by any action of the 1931 session of the Indiana legislature. However, it is unfortunate that some bills in which the medical profession was interested failed to pass the legislature. The lien bill should have passed, for it offered fair and just relief from losses suffered by nonpayment of bills for professional services rendered by physicians, nurses and hospitals in automobile accident cases. The so-called health officer bill did not get out of committee, and there are many physicians throughout the state who feel that the bill was deserving of favorable consideration. No doubt full-time health officers would be advantageous in Indiana if properly established, and it only remains to prepare a suitable bill and have the medical profession get back of it to have the Indiana legislature provide for such an advanced step. We were not surprised to have the tuberculosis sanitaria bill defeated, for to our notion it carried with it an element of extravagance that was not justified. Had the bill provided for a less number of institutions, well equipped, it probably would have stood a better chance of passing the legislature. As might be expected, the hardest fight was over the medicinal liquor bill aimed to rescind the provisions of the Wright Bone Dry Law which prohibits physicians from prescribing medicinal liquor. In reality the medical profession of Indiana will get along quite as well without medicinal liquor, just as we have been getting along well without it for many years past, and while it does seem a little inconsistent to question the therapeutic judgment of many good physicians as to what shall be prescribed for any given illness, we do believe that defeat of the medicinal liquor bill is not going to cause any great distress or loss to physicians or public in general. We always are pleased to have a legislature adjourn, for the Lord only knows how much deviltry a legislature can kick up, whether it pertains to the practice of medicine or an attempt to sell hymn books to the ungodly. At the present time we are doubly pleased with the adjournment of the Indiana legislature, first, because absolutely nothing was done that affects the physician in the practice of medicine, and, second, it will be two years before we can expect to have any more changes either for good or bad. In other words, as a profession we can be truly thankful as a result of not only what the last legislature did do but what it did not do, for it could have made things mighty uncomfortable for the medical profession as well as the public.

CARING FOR THE INDIGENT SICK

Several county medical societies in Iowa have adopted what they call the best method of caring for the indigent sick. Furnishing medical service for the county's poor presents a serious problem

to the members of most county medical societies, and a brief description of the Iowa plan, its purpose, operation and benefits, is herewith given. How the county is to pay for medical services for those cases that must be cared for locally is a problem for which various solutions have been offered by supervisors, social workers, volunteer agencies, medical societies and individual physicians, but every method proposed has various drawbacks, most of which end by working numerous hardships upon the medical profession. Eleven county medical societies in Iowa have been operating for some time on a plan that seems to be entirely satisfactory, and many other county medical societies in Iowa are contemplating the adoption of the same system.

The plan is that of a blanket contract between the medical society and the county supervisors, of which the county pays a fixed annual sum in return for which the society furnishes for the county poor all medical care not provided at the University hospital or other hospitals which furnish care at the expense of municipality, county or state. The annual payment varies from $1,600 to $12,600, and goes into the society treasury. Service to the indigent sick is rendered upon the order of the supervisors, township trustees, and other authorized persons, and such service is distributed among the members of the society as equally as possible. The advantage of this plan, according to its advocates, are, first, unjust inequality in payments to physicians for indigent sick services is eliminated; second, removal of friction between the county medical society and its various members and the board of supervisors and social workers; third, general satisfaction of the community with its physicians because of effective medical service given to the indigent sick; fourth, a full treasury which solves the financial problems of the county society.

The latter point is an important one in many ways. The secretary-treasurer need never worry about collecting dues nor members about paying, for the county, state and A. M. A. dues can be paid out of the general funds of the component societies. Surplus money is always available to bring the best of speakers from even distant points, so that the problems of the program committee are solved. Medical protective insurance on a group basis can also be provided for every member out of the general fund. As an illustration of the financial success of this plan in Iowa it is interesting to note that the society which receives the smallest per annum payment still has in its treasury some seven thousand dollars. Incorporation of the county medical society is a necessary step, since the corporation then can enter into a contract with the supervisor and more especially since incorporation relieves the member physician of any individual liability for actions of others.

Two or three county medical societies in Indiana are operating under a plan similar to that used in Iowa and we are told that it works out very satisfactorily. However, in most of the counties of the state there is no recognition of the fact that caring for the indigent poor is a *community obligation,* and not an obligation that should be delegated to a few philanthropically inclined physicians who are expected to and often do care for the indigent sick without pecuniary reward of any kind whatsoever. In the cities, welfare agencies are adding to the impositions practiced upon physicians by asking for and receiving gratuitous professional services at the hands of physicians for not only the indigent sick but many others who could and should pay a very small fee for the services rendered. Contract practice has been frowned upon and even condemned through official action by many medical societies, and yet contract practice by societies which applies to the *indigent sick only* is worth favorable consideration as it offers a solution of the problem of giving the indigent sick appropriate attention at the expense of the community and not at the expense of the medical profession. Services for the *sick poor* requires a different arrangement but can and should be handled by the organized medical profession with the assurance that no one need want for adequate medical and surgical attention.

USE OF "DROPS" IN FITTING GLASSES

During the past few weeks several optometrists in Indiana have been talking over the radio concerning the care of the eyes and advising people not to submit to "drops" for the reason that such a procedure is unnecessary for the examination and proper fitting of glasses. They might have stated that the principal reason for objecting to "drops" is because legally optometrists are not permitted to use them. They also would have been telling the truth had they stated that in persons under the age of forty, and oftentimes in patients older the estimation of errors of refraction without the use of "drops" to suspend the accommodation is guess work, and while it is true that an optometrist may guess right, like the fellow who picks the winning number in a lottery, yet it is guess-work just the same. They also might admit very truthfully that if ophthalmologists or medical eye specialists could be satisfied that the static error of refraction could be determined in every instance without "drops" or, in other words, suspending the accommodation, then the medical eye specialists too would be fitting glasses without the use of "drops" and a retinoscopy which requires a dilated pupil, for they probably are more competent in dealing with refraction problems than the optometrist or optician and just as anxious to adopt the shortest and easiest way. Family physicians and in fact all medical men should discredit this teaching of the optometrists concerning the use of "drops."

OCCUPATIONAL DEAFNESS

Deafness as a result of a noisy job will receive some consideration in the near future, even though we still continue to put up with unnecessary noise in all of our thickly populated communities. The well-known boilermaker's deafness is not the only deafness that may occur in connection with industry where many occupations are carried on through a continuous and nerve-wracking din which if the workers are obliged to tolerate for a prolonged period invariably produces more or less impairment of hearing. This occupational deafness usually comes on insidiously and perhaps is not noticed until the victim's attention is called to it. It is produced by a degenerative process in the internal ear, and unfortunately little or nothing can be done to improve the hearing. What is needed is a rational program of prevention through the adoption of means that will prevent noise. The problem is a difficult one to solve, and yet the time will come when measures will be put into effect either to stop the noise or penalize industry for the deafness produced. Already the question has been raised as to whether the state morally has the right to permit conditions which destroy the functions of any part of the body, and certainly the individual citizen should be informed of these conditions and given the option of refusing or accepting them.

CONTRACT MEDICAL SERVICE FOR THE COUNTY POOR

Through our news clipping service we learn that several counties in the state contract for medical treatment and minor surgery for the poor through competitive bids from physicians, though in one county only one bid was received and the contract was awarded to the only bidder. The system is wrong, and for the reason that as a rule the better physicians in the county will not bid for contract work, and in the final analysis the poor, who are deserving of good services, receive not only scant attention but attention that comes far from being trustworthy. A much better way of handling the matter would be for the county medical society as a society to make a proposition to the county whereby the society would undertake to furnish trustworthy service, even to the extent of furnishing consultation and operative work, providing the county pays adequately for the service. We have been informed by one township trustee in a populous community that contracts for furnishing medical and minor surgical attention to the needy poor in his township always is awarded the lowest bidder, who usually is one of the least qualified physicians in the community, and that he has known of years when a single service would not average ten cents per patient. The contract does not include the administration of antitoxin in diphtheria, nor does it cover obstetrics or major surgery, but it includes all other services. Perhaps if the local county medical society would interest itself in seeing that the poor have adequate medical and surgical service, and that those rendering the service are awarded fair compensation, everything pertaining to the matter would be on a far more economical basis than it is at the present time.

ORAL VACCINATION AGAINST TYPHOID

As one reads European medical literature he sees that a great deal of attention is being given to the matter of oral vaccination against typhoid fever. This method it is claimed gives quicker and higher immunity than the subcutaneous method and also causes no malaise, as is so commonly observed after the usual typhoid vaccination. There is no doubt that present methods of vaccination against typhoid fever have been highly effective in preventing the disease. Unfortunately, however, they have caused such a heavy "kick" that a great many people have been loath to subject themselves to this period of discomfort when typhoid fever does not seem to be a very threatening possibility. The method of oral vaccination is as follows: Upon arising in the morning two capsules (each containing a half gram of dried bile) are taken with a glass of hot water. After thirty minutes one cubic centimeter of typhoid vaccine is taken in a glass of warm water. This is repeated on the two succeeding mornings. Very rarely is there any discomfort whatever. The method is deserving of trial in this country, and it is hoped that the material may be made available and that research will be done in this country.

WHY SOME PHYSICIANS DO NOT ATTEND CHURCH

"Why is it that so many physicians never attend church?" was the question asked us recently. We may well ask why so many lawyers, judges, school teachers, and educated people in general are not included, for it is a well-known fact that a fair percentage of educated people are not churchgoers, and we think that it is up to the church to tell why. It isn't because these educated non-churchgoing people do not believe in some form of religion or have the greatest respect for the Bible and its teachings, but it is because they object to sitting for an hour and a half or two hours in a church where perhaps they must tolerate a lot of atrocious music, and listen to what for the most part are considered mediocre sermons that give the intelligent person not the slightest inspiration or enlightenment. Perhaps it will be said that some want their religion sugar-coated, but if it is the only way that you can get religion into some people then let them have it sugar-coated, but remember that some of the bitterest as well as most effective medicine may be sugar-coated and willingly and

even agreeably taken by the patient with the most satisfying results. Not all ministers can be brilliant or entertaining, but the most of them could gather into their churches more of the intelligent class, to which we think physicians belong, if they put forth a little more effort to make their sermons interesting, or at least give their listeners something that can be taken away as worth while. Furthermore, many physicians think, as many others think, that if the churches generally would lay less stress on a creed that cannot be accepted in its entirety by even all their own members and is still less acceptable to outsiders, the churches would be more popular and receive more generous support.

AS WE SEE OURSELVES

Our attention has been called to an article in *Collier's* for August 2, 1930, by Logan Clendening, M.D., an internist, a member of the A. M. A. and Fellow of the American College of Physicians, who writes on the subject, "Let Your Doctor Do It." The article is not one of those commonly seen which might be entitled "As Others See Us," but is an exposition of our shortcomings as seen by a reputable member of the profession—and how he does hold us up to criticism, much of which, we think, is entirely unfair and exaggerated. A few quotations are as follows: "If the general practitioner doesn't find a diseased organ, nature usually heals the man in time anyway and nobody is worse off; but the specialist—he finds something, then he itches to treat it, or cut it out, or manipulate it some way, and he damn near and often does kill the victim of his ministrations." Quoting a woman who had lost her husband he makes her say, "There is one thing that comforts me: even if my husband did die we had the very best surgeon we could get to take out his stomach." To which the author says, "Sure! the surgeon bumped off her husband doing a perfectly useless operation on his stomach, which would have done him no good even if he had lived, and all the surgeon gets is *praise*. But if the poor goat of a general practitioner had so much as given her husband a pill that made him throw up instead of moving his bowels you would have heard the howl to the Canadian border." Here is a rap at the specialist and his advertising: "Most men go into special work nowdays not because they are well adapted to it but because they think there is more money in it. And those fellows are the ones the public hears about. They talk over the radio, address church audiences, get in the newspapers by reading papers before medical societies, and generally ballyhoo themselves. Their actions have made every honorable medical man of our time hang his head in shame." To the question as to whether or not surgeons are deliberate grafters the answer is made, "Not entirely. Some of them are. But when a fellow with a surgeon's mind—which in general is a pretty simple organism, you know, childlike—has learned to do an operation dexterously and without too high a death rate, he is perfectly fascinated by his accomplishment. He naturally wants to do it all the time, and he naturally sees in every person a proper victim for just that procedure. And such a surgeon does not see the other side. The number of people, I mean, who refuse to have the operation and get perfectly well anyhow."

The thought occurs to us that in all probability the surgeons of Kansas City would like to burn Dr. Clendening at the stake—or at least surreptitiously put arsenic in his coffee.

MEDICAL AND SURGICAL FEES—A COMPARISON

WE hear much about free medical and surgical services to all and that even under our present system physicians should charge the rich no more than is charged people in moderate circumstances. In fact, while no objection is raised to the enormous fees paid to attorneys, sometimes for comparatively trivial services, and the colossal salaries paid some executives of corporations, yet if a physician or surgeon renders invaluable services to a wealthy patient and charges even a moderately large fee he is branded as an extortionist and sometimes called a robber. Recently the daily press announced that the president of the American Tobacco Company last year received a salary of one million dollars and bonuses amounting to a million more. Think of it—a salary of over two million dollars in one year! And think of the attorneys who occasionally receive a fee of a million dollars for successfully conducting one case! And then think of the howl that is heard around the world if the best of physicians or surgeons have the nerve to ask for a large, though relatively small fee, for the highest type of professional services. There is something radically wrong with our economic structure when some of our citizens can go from poverty to the billionaire class in a very few years, when executive services can be accepted at two million dollars per year, when legal ability can be appraised at a million dollars for a single successful court battle, and when medical and surgical services, the most skilled services of all, are placed on a par with the services of the salaried clerk. They say that it is genius or rare executive ability that leads to the recognition of the fairness of such extravagant compensation, but the fact that physicians and surgeons often exhibit great genius and almost uncanny judgment seems to be forgotten. And they propose to throttle incentive and depreciate genius and ability by instituting state medicine. From the humanitarian standpoint we are in entire sympathy with the idea that no person, no matter

what his or her financial circumstances, should be denied the privilege of having adequate medical, surgical and hospital attention, but from the economical standpoint we do not see the justice or fairness of any plan whereby the value of skilled services by members of the medical profession are at all times and under all circumstances to be discounted. If all members of a skilled profession like medicine are to be penalized by limiting the amount of income to that sufficient for a comfortable living only, then why not treat members of other professions and trades and so-called big business likewise? What is sauce for the goose should be sauce for the gander.

WHEN DOCTORS DISAGREE

Physicians are trained to be individualists. Their experience in practice strengthens the tendency. For this reason we cannot expect them always to agree on such complicated matters as are commonly involved in diagnosis and treatment. Medical ethics has tried very hard to find a way to make the disagreement of physicians look as well as possible to the bewildered layman in the case, but there is still much room for improvement. When, however, the physicians are both working together for the welfare of a given case the difference of opinion can be understood fairly well, and the prestige of the profession suffers comparatively little.

What shall we say though when the two physicians are each in the employ of a party in court. The expert medical witness of the plaintiff testifies that such and such is the case, and maintains his position stoutly. In his turn the expert medical witness of the defendant emphatically declares that exactly the opposite is true and cites his authority. The jury and the spectators frequently are forced to the conclusion that it is more than possible that the prospect of a fat fee has influenced the "scientific" opinion of the medical expert witness. We do not wish to imply that any reputable physician would have his professional opinion warped in the least by the exigencies of the case, but it all looks mighty queer to the layman.

It is common practice for the medical witness to "coach" the attorney on his side as to what questions are to be asked. This is quite all right too, provided the sole purpose is to bring out the truth in the case to the end that justice may be served, but it is hard to escape the conviction that the exact scientific truth is not so much desired as a twist that will help win the case. In legal practice it is presumed that there are always two sides to the argument, and it is the recognized function of the lawyer to win his case if possible. The ideals of the medical profession fit into this plan as does a square peg in a round hole.

So far as we can see there is only one way out of the situation, and that is to have expert witnesses, whether medical or otherwise, *called by the court* rather than by one or the other side. In such case the witness would be in the employ of neither contesting party, and there would be no reason to suspect that the fee had anything to do with opinion. Difference of opinion on the part of medical experts in such case would not undermine the confidence of the public in the integrity of our profession. As the situation now stands many physicians are exceedingly loath to testify, even when they are convinced that they are in the right, for the reason that they are afraid of being accused of just such an influence. Furthermore, they do not desire the heckling of the opposing lawyer, and the necessity of refuting the testimony of some other physician who is trained improperly or is unscrupulous. The solution is to have medical witnesses called by the court. The welfare of the profession demands that such a law be passed as would make this mandatory or at least possible. Certain other states now have such a law, and it is proving most satisfactory. The expert witness can present only the real facts when he is free from the suspicion of taint and the heckling of lawyers.

INSURANCE COMPANY REFUSES TO RECOGNIZE PSEUDO MEDICAL CULTS

The Indiana Travelers Assurance Company issues accident and sickness insurance policies all of which stipulate that the insured must be under the care of a licensed physician or surgeon in order to collect indemnity. The company consistently has refused to recognize chiropractors, naturopaths and kindred healers, whether licensed or not. Recently this company got into a controversy with the insurance commissioner, in connection with a policyholder who suffered a badly sprained ankle and who went to a chiropodist for treatment. The chiropodist told the patient that his trouble lay in his arches, and proceeded with some manipulative treatments which grossly aggravated the trouble. The insurance company objected, and directed the patient to a duly qualified physician, but the patient continued with his chiropodist. The company has, therefore, refused to recognize the claim for indemnity under the accident insurance policy issued. Eventually the case was brought to the attention of the insurance commissioner, and through one of the chief assistants an arbitrary ruling was made against the company. The company has now filed a brief with the insurance commissioner for a hearing.

To us it would seem that good law is good common sense, and by logical reasoning it would seem that it is not fair to presume that an uneducated and untrained chiropractor, naturopath or podiatrist could with any degree of skill or trustworthiness care for those diseases or deformities the alleviation of which should be entrusted to the physician and surgeon who has been trained specially for that particular work. Furthermore, it would seem to

us that the stipulation in an insurance policy that a sick or ailing person must receive attention at the hands of a licensed physician or surgeon if he is to recover upon his policy, is not only a sane protective feature for both insurance company and policyholder, but ought to be entirely legal as to stipulation. The new standard dictionary defines a physician as "one versed in or practicing the art of medicine that heals bodily disease by the administration of remedies." The same authority defines a surgeon as "one who practices surgery, a practitioner who treats injuries, deformities and disorders by mechanical and operative procedures." By no stretch of the imagination or juggling of the meaning of words could a chiropractor, naturopath or podiatrist be considered within the scope of either of these definitions. The new standard dictionary defines a chiropractor as "one who practices chiropractic," and defines chiropractic as "a drugless method of treating disease chiefly by manipulation of the spinal column." Podiatry is defined as the same as chiropody, and a chiropodist is "one who treats ailments of the hands and feet, such as bunions,—a corn doctor." To say that one qualified solely to manipulate the spinal column, or to remove corns and bunions, and to treat a few other similar ailments is either a physician or surgeon within the above definitions of such terms, or the generally accepted meanings of such terms, borders on the ridiculous. Incidentally, it would be a good thing if all sick and accident insurance companies adopted the same course as the Indiana Travelers Assurance Company in refusing to recognize chiropractors, naturopaths, podiatrists and kindred healers as qualified to sign physicians' statements on claim papers, in either accidental injury or sickness cases. Furthermore, it would be a good plan to have sick and accident insurance policyholders know that such a stand has been taken, for in reality it not only is to the best interest of the insurance company but the insured as well.

HOSPITAL FINANCING

Anyone interested in a study of hospital costs, both from the point of view of construction and maintenance costs and the cost to the patient who receives hospital service, will find a book written by C. Rufus Rorem, published by the press of the University of Chicago, a source of a great deal of valuable information. There is no denying that both the public and the medical profession have indulged in a good deal of random and superficial criticism of hospital costs which would have more point if done in the light of all the factors which enter into the question. While the author has tried to make the book understandable by the average reader, it is true that a certain familiarity with bookkeeping terminology is necessary to follow him. Unfortunately, probably not one doctor in a hundred knows how to read a balance sheet; therefore, one's handicap in understanding this book is evident.

The following figures are of interest: The total capital investment in hospitals in the United States is $3,100,000,000. It requires an investment of $5,000 to $10,000 for each hospital bed. The total amount of endowment capital of all hospitals is approximately $437,000,000. This amount provides income sufficient to finance approximately two percent of the average number of patients continuously hospitalized. A very interesting point developed is that, in computing the cost per patient per day receiving hospital service, it is a mistake to omit fixed charges which are interest on capital investment and depreciation. These fixed charges must be added to other costs in operating a hospital if an accurate understanding is to be had of how much it is costing per patient per day. Fixed charges of course vary in a given case, but they are estimated at approximately $2.00 per bed per day. Thus if a superintendent estimates the cost per bed per day on the basis of cash expenditures during the year and arrives at say $3.84 or $4.50 per day he must add approximately $2.00 per day in order to arrive at the correct figure. These figures do not necessarily constitute the basis of what the hospital should charge the patient, but they certainly represent the actual cost of maintaining a hospital and a failure to take account of fixed charges explains much misunderstanding in hospital financing.

This book with its careful analysis of the business phase of hospital construction and maintenance is an indication of the close scrutiny of non-professional observers of medical problems in a field where lay criticism is both intelligent and timely.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

INQUIRY has been made concerning a young man who in New Jersey is posing as a senior in Indiana University School of Medicine and gives as his name Harry W. Horn, or H. Wallace Horn, Jr. There is no student by that name listed in the records of the Indiana University School of Medicine and it is thought the young man may be an impostor.

Well, we didn't get medicinal liquor, and the Wright Bone Dry Law survived the rough handling given it by the legislature which has just adjourned. We shall survive all right, and perhaps get along as well without medicinal liquor as we would with it, but it does stir up the animal in us a little to think that the judgment of medical men cannot be trusted. It also hurts to have a few prohibition fanatics accuse all of us of wanting to become bootleggers.

That physicians are gullible is proved by the cigarette advertising that stares us in the face whenever we pick up a popular lay publication, and produces a discordant sound in our ears when we listen to the radio. Not one of twenty thousand or more cigarette-endorsing physicians fully believes his own endorsement, and he was cheap enough to sell his fraudulent endorsement for a carton of cigarettes. And yet they say that those physicians belong to a noble profession!

Physicians seem to shun or dislike recommendations or advice from fellow practitioners or from enterprises conducted under the auspices of the medical profession. Thus specious claims of lay manufacturers of drugs and biological products are accepted in preference to recommendations and warnings from the Council on Pharmacy and Chemistry of the American Medical Association. Evidently physicians are no more discriminating than that portion of the American public that enjoys being humbugged.

There are many delinquents in the payment of state medical association dues. Probably in every instance delinquency is due to inexcusable negligence. Unfortunately such carelessness sometimes carries with it a penalty, as for instance in the refusal of the Association to furnish medicolegal defense to any members who have not paid their dues on or before February 1st. Medical society dues are payable regularly at a specified time each year and we fail to understand why any physician should not consider the obligation as binding as the payment of taxes.

We have received information from the Illinois State Board of Health to the effect that the Board has discontinued the free distribution of bacteriophage. The practice of furnishing the bacteriophage gratuitously to a large number of physicians and institutions was considered as a part of experimental and research work to determine the curative value of the product. It now has been deemed advisable to withdraw from the field and let the commercial manufacturers of biologic products supply the demand. The matter of furnishing bacteriophage gratuitously was discussed in the February issue of The Journal.

The New York Postgraduate Medical School and Hospital now has been made a part of the educational system of Columbia University. This places all of the postgraduate teaching on a university basis. It is expected that the medical program being developed under the leadership of Columbia University will make New York City the center of graduate medical education of this country, and will attract physicians from all parts of the world. The establishment and maintenance of adequate facilities for postgraduate work is one of the most important steps that could be made for the advancement of medicine and surgery in this country.

Of all the idiotic gestures practiced in some of our public schools the "tooth brush drill" ranks among the leaders. Many brushed teeth decay and many teeth that never encountered a tooth brush do not decay. It is a well-known fact that some uncivilized races of people and many of the peasants of Europe never saw a tooth brush and know absolutely nothing about mouth hygiene and yet suffer very little from tooth decay. The more recent teaching concerning dental health requires the selection of a proper diet, early dental attention and simple mouth cleansing. Massage of the gums is valuable for those persons who will not eat a certain amount of coarse food.

Glandular therapy is getting to be a fad that is running wild among many physicians. Most of the impetus has been encouraged by the exaggerated and fallacious statements put forth by commercial manufacturing concerns that have profited enormously through the sale of many absolutely worthless glandular products that have been sold at high prices. The average physician depends too much upon what the manufacturers of drugs and biological products have to say concerning the therapeutic value of any preparation. The A.M.A. is operating a bureau that is intended to protect the medical profession from impositions practiced by the commercially inclined, but the trouble of it is that most of the physicians pay no attention to the warnings or recommendations of the Bureau and hence glandular therapy of every description received undeserved approval.

Dr. Ray Lyman Wilbur, Secretary of the Interior, and ex-president of the A. M. A., recently has published a feature article in the lay press in which he calls attention to the inadequacy of medical service under present conditions, and he complains especially about the duplication of effort, with attending unnecessary service, and the ultimate increased cost to the patient. He suggests that the medical profession can preserve its identity and at the same time render more efficient and adequate service by pooling its energies and resources in group clinics. He intimates that such a plan would give far better service, and at a great saving in cost without injuring the economic interests of the profession. Certainly the suggestion has merit and is worthy of serious consid-

eration at this particular time when there is a very strong movement on foot to have the state take over the practice of medicine.

No matter what our political faith may be we are pleased to know that a republican governor has refused to approve some of the extravagant appropriations made by our last state legislature and in consequence we are saved from needless taxation as an added burden to what we now carry. It also is unfortunate that President Hoover's objection to riotous extravagance in appropriations by Congress did not prevail. When will the people of this country awaken to the dangers of needless expenditure of public funds and the consequent impositions upon every community through increased taxation? Among appropriations of questionable merit are those by our state and by our nation for hospitals that in reality are not needed or at least to the extent provided by the appropriations. Aside from the extravagance we may well pause and consider what our expansion of this paternalistic attitude may mean.

The president of the Minnesota State Medical Association says that he cannot think of an adequate reason why his organization should have chosen him for the job of president in 1931, inasmuch as he cannot promise to follow with any distinction in the footsteps of his predecessor, although he does promise to conduct himself and the business of his organization as worthily, honestly and energetically as he is able. More important than all, he admits having had a considerable experience with Minnesota politics and the Minnesota legislators, and he therefore promises that the vitally important legislative program of his state medical organization will be carried out effectively this year. There is a man who is a distinct asset to the Minnesota State Medical Association, for while he may possess splendid scientific attainments it is rare fortune that gives any state medical association a member with a profound knowledge of politics and politicians.

The State of Wisconsin holds that a doctor who is a party to the practice of fee-splitting, openly or secretly, is guilty of criminal fraud and liable to fine and imprisonment and the loss of his license to practice. Ho, hum! It reminds us of the Volstead law and its severe penalties. In Indiana we have the Wright Bone Dry law with its severe penalty. However, in Indiana as elsewhere there is plenty of whiskey to drink and plenty of people to drink it. Probably the Volstead law applies to Wisconsin, even to Milwaukee, though we have a sneaking suspicion that the law is not enforced in Wisconsin any more than it is anywhere else, perhaps not as much, so why should Wisconsin think that it can enforce a fee-splitting law? Fee-splitting probably is as common in Wisconsin as it is in Indiana or any other state, but we will give five dollars for the picture of any physician of Wisconsin who in any court of law in his state is found guilty of the practice.

In Iowa the assistant attorney-general has held that a chiropractor or osteopath may certify children to be non-infectious from a communicable disease and that the certificate must be given the same weight by a board of education as one made by a physician. Isn't that sweet? Some of the barbers, elevator men, and laborers of one kind or another, following a few weeks of training (?) in a so-called chiropractic school are permitted to practice medicine in some states, and of course not one of them knows anything more than a rabbit about communicable diseases or the bacteriology or pathology of any abnormal condition, and yet the opinion of such an incompetent, which may have an important bearing upon the health of the community, is to be given the same weight as the opinion of a regular physician who has had two years of university work, four years of nine months each in a medical school, and an additional year as intern in a general hospital. Why have any education if a premium is placed upon ignorance and incompetency?

Most of the Y. M. C. A. organizations and the athletic clubs are advertising to their members what they call "individual health service under expert counsel." As a matter of fact the "expert" is an ordinary masseur who pretends to give advice as to the use of ultraviolet rays, infra-red rays, galvanism of various kinds, mechano-therapy and food fads for all those who for any reason consider themselves to be under par. Of course some of this treatment is positively injurious to men suffering from organic troubles which should have the attention of a competent physician, but that fact doesn't seem to be taken into consideration. If some of these institutions will insist upon a physical examination of all those who wish to avail themselves of mechanical appliances that are available, and receive suggestions and advice from a medical man before putting physical therapy into effect, some real good will be accomplished and without harm. We are strong for physical therapy, but we think it ought to be under the advice of medical men, and especially when it is to be employed by middle-aged and old men.

The birth control advocates have been trying very hard to spread their propaganda, and while they may not be responsible for spreading knowledge concerning the use of contraceptives, still every boy and girl in the first year of high school knows all about contraceptive measures. Indirectly the birth control clinics and various societies preaching that gospel have been responsible for the widespread dissemination of such information among the young. Most of the reputable medical men in New York City have been opposed to the birth control clinics and, in fact, are opposed to

the indiscriminate spread of birth control knowledge, and in November, 1930, the medical society of the County of Kings (New York City) approved a resolution which reads as follows: "Resolved, that the Medical Society of the County of Kings reiterates and emphasizes the position which it consistently has maintained for more than a decade in opposition to the enactment of any birth control measure or any sterilization measure by the legislature of this state (New York) and urges the senators and assemblymen from this county to work and vote to prevent the enactment of such legislation."

Almost as dangerous as the medical quack is the educated and well-trained physician who is so opinionated that he thinks he is the only one who can make a correct diagnosis or institute efficient treatment, and because of this superior knowledge he thinks he is justified in making snap diagnoses which occasionally hit the mark but more often miss it. Such a man usually discredits any and all confreres, and is so stubborn and resentful that he never admits that he is or can be in the wrong. It never hurts any of us to have a wholesome respect for the opinion of the other fellow who may have enjoyed advantages equal to or greater than our own. Furthermore, it leaves a little better thought in the minds of patients as well as confreres if a physician is willing to admit that it is possible for him to be mistaken in a diagnosis, prognosis or treatment, for occasionally some other fellow may set him right in the conduct of a case and ask no special favors for it either.

If anyone doubts the trend toward state medicine he should read critically the pamphlets sent out by the Committee on the Cost of Medical Care, and the conclusions drawn by the writers. The real meaning may be camouflaged but a careful analysis of the statements shows that it is there just the same. For instance, in one of the recent bulletins, in discussing the relationship of the medical profession to public health activities, the idea is conveyed that it is illogical to separate medical charities and preventive medicine, and that as public health officials have so much to do with preventive medicine it goes without saying that they should be masters of the situation, supervising all charities and preventive measures, "with practicing physicians acting under their supervision." Such an admission surely indicates what we have pointed out heretofore, that some public health officers are openly favoring state medicine and in all probability most of them secretly cherish the thought that eventually state medicine will dominate and health officers will be the ring-masters over medical men who will perform like trained seals, be satisfied with the compensation awarded the performer, and appear satisfied with the loss of freedom.

We have observed that many small town as well as city newspapers regularly carry the weekly sermon or address delivered at the local Christian Science Church. In fact there are no other churches that as a regular thing are shown such liberal consideration. Furthermore, the printed announcement of a Christian Science lecture may be displayed prominently in the show windows of the principal business houses of the town or city, to the exclusion of announcements of every other character which generally are refused space. The reason is not hard to discover, for more than one merchant has admitted that he virtually is coerced through the threat or insinuation that unless he does extend such favor he must expect retaliation by withdrawal of the trade of Christian Scientists. All of which shows, as we have said heretofore, that the Christian Science church as an organization is a business concern that does not tolerate defeat of purpose. It maintains an advertising agency second to none, and it enjoys the distinction of requesting and receiving more free newspaper, magazine and circular advertising than any other organization in existence. The results show what can be done through organization and unity of purpose. The Christian Scientists get what they go after. Some other enterprises, including the medical profession, could profit by the example.

It may be a little early to draw a long breath of relief because the expected epidemic of epidemic meningitis did not show up. The experience in Indianapolis and elsewhere seemed definitely to indicate that cold or bad weather made the disease spread while it receded during open weather. The winter of 1930-31 has been remarkable for its mildness, and it seems likely that we owe the failure of the epidemic to develop to this fact. It is not too late, however, for a recurrence, and we shall not feel entirely safe until warm weather is actually here. Until February 20th there has been no more of the disease in the state than is commonly considered as the endemic normal. In the manner of spread, epidemic meningitis and poliomyelitis are very much alike except that the first usually comes in winter and spring and the latter in summer and fall. We shall be very pleased if the prediction of an epidemic of "polio" next summer goes awry, as has apparently that concerning meningitis for this winter. In spite of the fact that we are inclined to smile at the idea of Noah Webster and other epidemiologists of past times, it is a fact that weather has a marked effect upon the incidence of many germ diseases. It is said frequently that poliomyelitis is more prevalent during periods of excessive drouth. Possibly that is the reason for the recent recurrence.

Well, in Indiana the medicinal liquor question has been settled for two years at least, and while as a matter of principle we believe that a physician should be the judge as to what he is to use as a

therapeutic measure, yet from quite another angle we are satisfied with the action of our last legislature. We have been doing very well without legalizing medicinal liquor, and no doubt we will continue to get along well without it. The farcical fact pertaining to the whole question is that liquor for any purpose, medicinal or beverage, is obtainable almost anywhere, at any time. We regret to admit this, for *real* prohibition meets with our favor. However, public sentiment if it ever was strong for prohibition seems to have lost strength instead of gaining as we had hoped it would. It was called an experiment by President Hoover, and in more than one respect it has failed, much as we dislike to admit it. Even the attempt to "put sharper teeth into the prohibition law" has failed. Public sentiment may not be right, but it is powerfully effective in bringing about success or failure of any law. We do not for one moment believe that even a small percentage of the number of medical men in Indiana would become bootleggers if the last legislature had legalized medicinal liquor, but we admit that there is no real necessity for medicinal liquor, and if the defeat of the medicinal liquor bill has to the slightest extent aided the temperance cause then the defeat will serve a good purpose.

WE strongly suspect that many doctors do not appreciate fully the need of care in filling out the various details of the death certificate. It is supposed that the certificate is merely a legal form indicating that a given individual is dead. About such a matter there rarely can be any doubt, and so it seems a waste of time to go to any trouble about it. As a matter of fact it is extremely important that we know of what causes people are dying. The whole great system of vital statistics rests squarely upon accurate certificates of death, birth and the reporting of transmissible diseases. The conclusions reached in the use of such data can be no more accurate than the diagnoses of the practitioner who makes out the certificates from which the statistics are compiled.

Particularly interesting to the physicians of the state should be the fact that Indiana is one of the original registration states of 1900. Only one other state west of the Appalachian mountains (Michigan) can claim such a distinction. Credit for our being one among the first should go to Dr. J. N. Hurty, who was for a quarter of a century the secretary of the Indiana State Board of Health and who was seeking to put Indiana in the forefront in matters pertaining to health. It is very gratifying that at the present time every state in the Union except Texas is in both the Death and Birth Registration Area. Texas is in the act of coming in. This means that from now on we will have increasingly valuable statistics and great effort should be made to make them as valuable as possible.

A PHYSICIAN in one of the cities in the northern part of the State sends us a form letter which evidently has been widely distributed, and signed by the superintendent of the Methodist Hospital of Indianapolis, in which a very frank bid is made for business. After calling attention to the facilities of the hospital, the skilled attention that is available, the letter says, "The advantage of sending your patients to the capital of your state, where you may keep in contact with them by telephone in each room, and where you may reach them by a drive on a direct road of hard paving, is obvious. * * * The Methodist Hospital of Indianapolis hopes to have the opportunity to cooperate with you." Our correspondent then says, "Is this your idea of high medical ethics?" To which he might also have added, "What do the other hospitals of Indianapolis and the well-equipped and efficient hospitals of other cities of the state think of this manner of soliciting work?" From a business standpoint we can well believe that this circular letter is a good piece of advertising that will bring results. However, it is a question if many other hospitals in the state, equally as well equipped for adequate medical and surgical service, and also served by men skilled in every department of medicine or surgery, may consider it in bad taste to solicit business in such a manner. It is even questionable if the members of the staff of the Methodist Hospital of Indianapolis who also have been praised will sanction such an enterprise, ostensibly in the interests of the hospital but certainly of equal interest to the members of the staff.

THE Fort Wayne Chamber of Commerce, through a legislative committee headed by a prominent attorney, vigorously opposed passage of a bill to protect hospitals and physicians from the imposition and abuses of those injured who receive the best of hospital and medical or surgical attention and then neglect or refuse to pay for the services. Just why should attorneys object to seeing hospitals and physicians protected? The objection comes with poor grace from a profession that always has been and probably always will be protected, as in our judgment lawyers are too much protected legally in the matters of securing extortionate and unreasonable fees. An investigation will show that about ninety percent of all automobile accident cases bring *no* compensation either to hospitals or physicians, and yet no hospital or physician refuses to give prompt and adequate service in such cases. Just why should such cases be excluded from the necessity of being fair and honorable in the payment of just obligations? Referring again to the action of the Fort Wayne Chamber of Commerce, which has offered an insult to the medical profession of Fort Wayne, how would that organization feel if the many physicians on its membership rolls resigned and influenced as many friends as possible to do likewise? Not only did the Fort Wayne Chamber of Commerce enter objections to the passage of the bill in

question, but it offered insinuations concerning the integrity and honesty of physicians in general, and there is no reason why those insinuations should pass without some kind of effectual rebuke. The best rebuke is to refuse to lend support to an organization that has so little respect for a very influential element in its membership.

The Coffey-Humber cancer treatment is to be pushed in New York City by a well-financed lay organization that seems to have been impressed with the results secured by the originators of the treatment, notwithstanding the fact that conclusive proof of the curative value of the treatment has not been established. It is said that the New York Academy of Medicine and the American Society for the Control of Cancer does not look with favor upon the treatment, and has refused to give endorsement to the plan of exploiting it in New York City. It seems strange that it is easy to obtain an abundance of money to finance something of questionable value and it usually is very difficult to secure financial support for something of proven merit. The proof of the matter is that the Coffey-Humber treatment has been exploited widely by the newspapers, and that in itself is sufficient to give the treatment favorable consideration by the public, whether justified or not. This, however, would not deter scientific men from giving approval of the treatment if it had proved itself a cure as claimed. There are many trained research workers trying to find a cure for cancer, and they as well as the medical profession as a whole will welcome the discovery of a cancer cure, no matter from what source it emanates, but the Coffey-Humber treatment has not as yet produced results that are at all convincing as to its superiority over other methods of treatment, and until more convincing proof is produced it is the part of wisdom to withhold endorsement. Doctors Coffey and Humber are two very fine physicians, highly respected members of the medical profession, and it is unfortunate that their conscientious and praiseworthy efforts should have been so exploited, presumably without their consent or approval.

Birth control has been approved, broadly though conditionally, on grounds of health, economics and humanity, in a report recently issued by the Federal Council of Churches of Christ in America, representing many denominations of Christian religion. Perhaps the proper attitude, but the indiscriminate teaching of birth control, such as prevails now, is bound to increase sexual license among the unmarried. However, as some social worker has said, "What are we going to do about it?" It is admitted that the sex urge has no conscience, but until recently fear of social consequence rather than the pangs of conscience was a deterrent. With the general dissemination of birth control knowledge coupled with our present-day tendency to sanction liberties that in general were not tolerated a few years ago, we may expect a decided increase in promiscuous sex relations. There is a logical reason for giving birth control information to the married, and it should be given by members of the medical profession, but the widespread dissemination of such knowledge among the youth of the land can have no other effect than lower our general standards of morality. When we make it easy to transgress the laws of morality without penalty then we increase the number of transgressors and transgressings. While not condemning the churches for their recent approval of birth control we must admit that there never was a time when churches were so hard pressed to obtain a guiding influence in the moral lives of our young. Public sentiment now seems to sanction and even encourage many social and moral practices that a few years ago would have penalized severely the offender. Is it not because our church and home training is faulty and doesn't it indicate the influence of the church to be waning?

We had the great pleasure—not to say honor—of riding in a public bus a few days ago with the distinguished scientist (?) who invented San-Yak pills. He, supposing that ye scribe was a traveling man, immediately began to tell of the remarkable powers of San-Yak. It seems, according to this authority, that old age and most of the ills attendant thereto are due to the accumulation of red blood corpuslces and hemoglobin in the blood. The blood becomes concentrated and is therefore pushed through the vessels with much difficulty. This accounts for high blood pressure, apoplexy and poor circulation. The natural antidote, according to our scientific friend, for this concentration of the blood is chlorophyl, which until the present time we had considered a constituent of the green plants. The chlorophyl serves as a "carrier of the red blood corpuscles" and thereby permits them to go through the blood vessels in far greater ease. This of course lowers blood pressure and reduces the incidence of paralysis and poor circulation. "San-Yak is the only substance known to science that will increase the chlorophyl content of the blood." It is the result of years of patient research. It seems that many plants contain chlorophyl but that nearly all of this vital substance is destroyed by the "decompact" bacteria of the bowel ("decompact" bacteria were explained to be those bacteria which cause decomposition). San-Yak is an intestinal antiseptic that kills the "decompact" bacteria, thereby preventing the destruction of the chlorophyl and making possible its assimilation. As might be expected the increased chlorophyl content of the blood makes for the return of appetite, ambition and sexual vigor. Step right up, gentlemen! Step right up! Who will take the next box? Incidentally he told us what drug stores handled it and how much they sell in the course of a year—and you would be surprised!

If the results were not so likely to be serious we could have a great deal of fun laughing at some of the fads that are always being exploited. It is a fact that a small amount of iodine is highly essential to health. Iodized salt certainly has an established place in the dietary of the people of this and adjoining states. There are some who wonder if it may be somewhat stimulating to persons with certain forms of thyroid disease but as used in its present form the amount of iodine—while adequate for prophylactic purposes—is so small as could hardly cause serious trouble to anyone.

There is not the least reason to suppose that the iodine in some organic form is better than the iodide of sodium or potassium. We have been much amused to hear that certain enterprising poultry raisers have created a market for eggs from hens that have been fed on sea-weed, or kelp. Such material contains a considerable amount of iodine and it is a fact that the eggs from such hens do contain more iodine than ordinary eggs, but what of it? Eggs salted with iodized salt probably contain nearly as much iodine and the iodine in such form is just as readily assimilated. If folks want to pay twice as much for such eggs they should have the privilege in this land of the free, but we hope that the fad does not spread.

Likewise a very prominent dairy near Chicago is feeding the cows on kelp so that the milk will contain iodine. Such milk is much more expensive and not one whit better because of such treatment. We recently have seen the statement that an attempt is being made to increase the copper content of milk. Copper is undoubtedly essential to hemoglobin formation but is needed in but very small amounts. It is present in a wide variety of foods and these sources seem to have been sufficient for the red-blooded generations of the past. A few years ago we were trying to get iron into the diet in every possible way, and helped the grape growers by eating lots of raisins—which by the way are not particularly rich in iron. Now raisins are good food and iron is really necessary, but we cannot believe that it is in the interest of the public health to make as much fuss about it as has been customary. The individual who eats a wide variety of clean food served in as near the natural condition as possible need have little fear of any sort of dietary deficiency.

Dr. George E. Follansbee, chairman of the Judicial Council of the American Medical Association, quite recently has spoken publicly before a meeting of welfare workers concerning the inadequacy of medical service rendered a large part of our population, and he deplored the passing of the old-fashioned family doctor and the increase in the number of poorly educated and inadequately trained specialists with their bid for large fees and their willingness to render poor and oftentimes unnecessary services. Doctor Follansbee says that the medical profession must undergo reorganization with the idea of making it possible for all the people to receive good medical and surgical services at any and all times and at a cost that can be borne. He believes that one of the first steps to be taken is to adopt and put into effect some plan whereby *no* physician will be permitted to hold himself out as a specialist unless it can be shown that he has been educated and trained sufficiently to justify legal permission for such distinction. It further is stated that the public is becoming fully acquainted with the unsatisfactory conditions that exist today and that unless the medical profession itself corrects conditions then the state must attempt to solve the problem. It may not be amiss to call attention to the complaint made repeatedly in lay periodicals that at the present time there is no way by which the rank and file of the public can determine "who is a good doctor." It doesn't do to refer to membership in the local, the state or the national medical organization (American Medical Association) for many incompetent as well as dishonest physicians are members of all three organizations. It doesn't do to say that a physician having a large practice is a good physician, for quacks and imposters sometimes have large practices for a while. However, there should be some way of estimating a physician's ability by the amount and character of education and training he has had, and the manner in which he applies what he knows. But again referring to Doctor Follansbee's suggestions concerning reorganization of the medical profession, when are we going to start? Are we going to continue our present apathetic attitude and awaken only when the state medicine bombshell strikes us full force? Public sentiment is ripe for a change in our present plan of furnishing medical and surgical services, and already lay reformers are agitating various visionary and impractical schemes for regulating and controlling medical and surgical service. The problem is one which the medical profession should solve, and it is time for us to begin a reorganization of activities before someone else does it for us. An error now will be very difficult to correct later.

Concerning advances in the economic as well as the sanitary aspects of the milk industry we quote from a bulletin the following: "A new device for milking, consuming twelve and one-half minutes, under conditions that simulate those of the modern hospital, recently has been put into operation. The machine consists of a slowly revolving platform having stanchions for fifty cows. The cow approaches and steps on the platform, which is inclosed in an air-conditioned room, and then she is immediately washed, dried by hot air, a little of the fore-milk is drawn for inspection, and milking machines are attached so that by the time a platform has completed one revolution the cow has been milked and is ready to step off and yield her place to another animal. The milk is transferred through sterile pipes to the bottling

room, where it is bottled and capped by a machine, without exposure, to be distributed as certified milk in New York, Philadelphia and elsewhere. The milking machines are rinsed automatically and sterilized after each use. This system of milk production also includes medical, veterinary, laboratory and nutritional control of the animals, the workers, and the milk itself. Special attention is given to the quality and quantity of food given the cows with the idea of providing rations that are rich in the proper vitamins for the best quality of milk as well as the best health for the cow. Constant supervision of the health of the cow in the herd is maintained by a group of resident veterinarians. Once a week special inspection is made of the cows, barns, dairy buildings and equipment by a representative of the Medical Milk Commission, and once a month each cow undergoes a thorough physical examination. Before being admitted into the herd new cows are given all the preventive treatment used for cattle, and are kept quarantined for several weeks to make sure that the cow is free from disease and favorable to be placed with the herd. The slightest unfavorable symptom is sufficient to remove any cow from the milking herd to the hospital building. Once removed she cannot come back until she has passed another series of tests."

It is unfortunate that in every community we cannot have certified milk produced under such stringent supervision and inspection, though we realize that such milk probably would be prohibitive in cost to the average family. We also know how much more contented, happy, and healthy some cows are than are some human beings. However, we realize that the average person who owns cows, pigs, chickens or any animals that are money producing gives his domestic animals more health consideration than he gives his own children. It takes more education and more persuasion to get a person to apply preventive health measures to human beings than it does to get those same persons to utilize preventive health measures for their cattle or hogs. It may be strange, but it is true.

MEDICO-LEGAL DEPARTMENT

Albert Stump

ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

INDIANAPOLIS

Question: Who has the right to review hospital records including x-rays?

Answer: Where the hospital records are kept in the manner in which they usually are in a private institution those records belong to the hospital. The relationship between hospital and physician is such that the hospital occupies not exactly the status of a servant to the physician but rather the status of an independent contractor gathering and collecting data to give to the physician. The patient, or those responsible for the patient, pay the hospital directly for such services, and by reason of the custom and practice in the handling of the services in which the hospital is engaged the records are confidential in nature. But since they are prepared for the physician treating the case the patient impliedly authorizes the hospital to permit such records to be reviewed by the physician in charge of the case, or by those who are working with the physician and rendering professional services in connection with his treatment. The documents being of a private nature and the custom and practice of the hospital business being as it is, those records are not open to the public, but will be treated as private records belonging to the hospital which the patient himself ordinarily would not have a right to review. There is considerable confusion as to whether or not the hospital records are admissible in evidence. If they are admissible in evidence the hospital can be compelled to produce and exhibit the records in the cases in which they are admissible. It has been held in a large number of cases that in the absence of a statute the hospital records are not admissible. They are made admissible by statute in Massachusetts. They have been held to be admissible in the absence of a statute in Alabama and Rhode Island. I have not been able to find any case on that question in Indiana.

Question: Must the attending physician's consent be obtained?

Answer: The attending physician has no proprietary interest in the hospital record or x-rays. Such records are made for the purpose of assisting in rendering the professional service to the patient. The information which the physician obtains is confidential; that is, he has no right to make such information public and cannot be compelled to testify as to such information unless the patient waives the privilege of keeping such information confidential, except in special instances in which the statute has varied the rule, as will be shown in answer to later questions. This privilege is not the privilege of the physician but of the patient. Therefore, the attending physician's consent would be of no value.

Question: In case of industrial accidents in which the industry pays all charges, has the patient any right to have his agent review the same?

Answer: The confidential nature of the information obtained by a physician with the aid of the hospital, as I have stated it in answer to the preceding question, does not apply where the treatment is for accidents within the workmen's Compensation Law, where controversies as to compensation may develop between the employee and the employer. The privilege of the patient to keep all communications to physicians confidential has been limited by statute so that it does not apply in such a hearing. Burns 1929 Supplement, Sec-

tion 9472, being a section of the Act of 1929, reads in part as follows:

"After an injury and during the period of resulting disability or impairment, the employee, if so requested by his employer or ordered by the industrial board, shall submit himself to examination, at reasonable times and places, by a duly qualified physician and surgeon designated and paid by the employer or the industrial board. The employee shall have the right to have present at any such examination any duly qualified physician or surgeon provided and paid by him. No fact communicated to, or otherwise learned by, any physician or surgeon who may have attended or examined the employee, or who may have been present at any examination, shall be privileged, either in the hearings provided for in this act or any action at law brought to recover damages against any employer who is subject to the compensation provisions of this act."

Under this statute it is my opinion that the patient would have a right to have his physician review hospital records and x-rays.

Question: Have insurance companies the right to information without the patient's permission?

Answer: They do not have except as provided for in the Workmen's Compensation Act. If the patient refuses to submit to the examination, however, the right to compensation is suspended during the time of such refusal. If the patient waives his right to recover compensation the insurance company would have no right to the confidential information concerning the patient's case. But the fact that the patient is seeking to recover compensation in itself waives that privilege and opens the records to the inspection of the physician of the insurance company, but not to agents in other classes than physicians.

The foregoing answers constitute a statement of my opinion as to matters inquired about. But I should add frankly that there is such a lack of decisions being reported from the courts of review that one cannot say that the law is well established as to these questions. The general rules of the law of evidence, rather than decided cases involving these specific questions, constitute the basis of my opinions in the above answers.

DEATH NOTES

J. W. EIDSON, M.D., of Plymouth, died February 27th, aged seventy-seven years. Doctor Eidson was not in active practice. He was a graduate of the Medical College of Indiana, Indianapolis, in 1884.

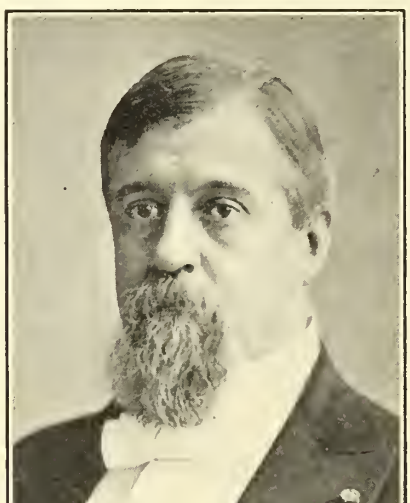
GEORGE F. PLEW, M.D., of Hymera, died February 17th, aged eighty-two years. Doctor Plew had practiced medicine in the vicinity of Hymera for fifty-four years. He graduated from Rush Medical College, Chicago, in 1876.

WILLIAM M. DEMOTT, M.D., of Otwell, died March 3rd, aged eighty-five years. Doctor DeMott served in the Civil War with the Tenth Indiana Infantry. He graduated from the Cincinnati College of Medicine and Surgery in 1871.

JAMES H. CANNON, M.D., of South Bend, died March 10th, aged seventy-nine years. Doctor Cannon had practiced medicine in South Bend for thirty-two years. He was a graduate of the Missouri Medical College at St. Louis in 1881.

ELMER M. HATCH, M.D., of Logansport, died March 19th, aged sixty-two years. Doctor Hatch graduated from the New York Homeopathic Medical College and Flower Hospital, New York, in 1888. He was secretary of the Logansport Board of Health.

GEORGE F. BEASLEY, M.D., pioneer physician of Lafayette, died March 11th. Doctor Beasley was eighty-nine years of age. He was a major in the Union Army, and had full charge of the rebel soldiers at Camp Douglass, Chicago, until they were exchanged for Union men. He served as president of the Indiana State Medical



G. F. BEASLEY, M.D.

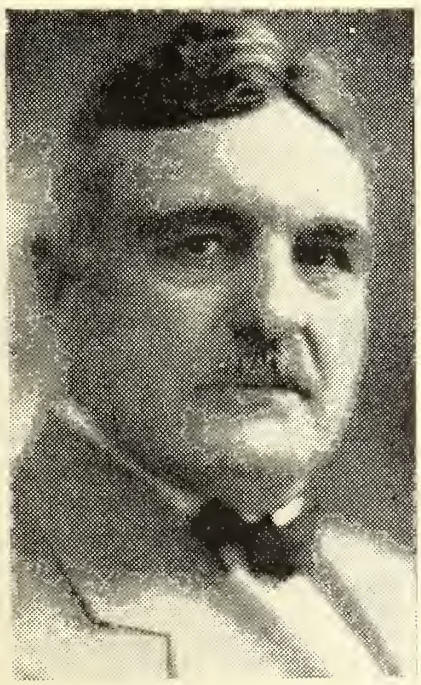
Association in 1893. He also served as president of the Association of Railway Surgeons. Doctor Beasley was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from Rush Medical College, Chicago, in 1864.

William Daniel, M.D., of Corydon, died March 5th, aged seventy-eight years. Doctor Daniel was a member of the Harrison County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Louisville Medical College in 1875.

Thomas F. Spink, M.D., of Washington, died March 4th, aged sixty-five years. Doctor Spink was a member and secretary of the Daviess-Martin County Medical Society, a member of the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from Miami Medical College, Cincinnati, in 1901.

Edward L. Swadener, M.D., of Terre Haute, died March 10th, aged fifty-one years. Doctor Swadener was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907.

Ward A. Smith, M.D., of Otterbein, died at a hospital in Lafayette, March 8th, following an automobile accident. He was sixty-six



Ward A. Smith, M.D.

years of age. Doctor Smith was a member of the Benton County Medical Society, of which he was president for many years, of the Indiana State Medical Association, and the American Medical Association. He graduated from the Kentucky School of Medicine at Louisville in 1892.

Philip Warter, M.D., of Evansville, died March 13th, aged fifty-seven years. Death resulted from spinal meningitis. Doctor Warter was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Vanderbilt University School of Medicine, Nashville, in 1900.

L. B. Schneider, M.D., of Fort Wayne, died March 10th, aged thirty-two years. Death resulted from a throat infection, after an illness of six days. Doctor Schneider was vice-president of the Fort Wayne Board of Health, was a member of the Fort Wayne Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the University of Michigan Medical School, Ann Arbor, in 1923.

NEWS NOTES AND PERSONALS

Mrs. Bernhard Erdman died March 6th at her home in Indianapolis.

Thomas J. Collings, M.D., of Rockville, and Mrs. Etta B. Sutton were married March 8th.

Dr. Arthur C. Rettig, recently of Blountsville, has moved to 509 West Jackson Street, Muncie.

Miss Agnes Smith, of Muncie, and Dr. Arthur C. Rettig, of Muncie, were married March 10th.

Dr. B. E. Lemmon and family, formerly of Spencer, have moved to Bloomington, where he will practice his profession.

At the March 24th meeting of the Indianapolis Medical Society papers were presented by Dr. David Smith, Dr. Walter F. Kelly and Dr. Foster Hudson.

Dr. Paul A. Campbell, formerly of Frankfort, has been appointed acting surgeon and head of the medical department of Culver Military Academy.

Dr. Louis H. Segar, of Indianapolis, talked on "Recent Advances in Pediatrics" before the Tippecanoe County Medical Society at Lafayette, March 12th.

Dr. Frederick Applegate, of Indianapolis, has located in Corydon, where he will continue the practice of his grandfather, the late Dr. William Daniel.

The Montgomery County Medical Society held a meeting at Crawfordsville, February 19th. Doctor Leonard Ensminger, of Indianapolis, was the guest speaker.

The monthly dinner meeting of the Howard County Medical Society was held March 6th.

Dr. John H. Warvel, of Indianapolis, was the guest speaker.

DR. F. M. GASTINEAU, of Indianapolis, was the guest speaker at the March 6th meeting of the Jay County Medical Society, held in Portland. His subject was "The Treatment of Syphilis."

THE March 10th meeting of the Indianapolis Medical Society was held in the Auditorium of the Indianapolis City Hospital. The program for the evening was furnished by the hospital staff.

DR. WILLIAM EDWARD FITCH, author of a book entitled "Mineral Waters of the United States and American Spas" has been made medical hydrologist and medical director at French Lick Springs.

AT the April 9th meeting of the Tippecanoe County Medical Society, held at the Home Hospital, Lafayette, Dr. Robert W. Keeton, of Chicago, presented a paper on "Recent Advances in Endocrinology."

MEMBERS of the Madison County Medical Society held their regular monthly meeting March 17th at the Grand Hotel, Anderson. Dr. C. A. Walton, of Anderson, presented a paper on "Cross Roads in Medicine."

DR. ROBERT M. KELSEY, recently of Louisville, Kentucky, has taken over the office and practice of Dr. E. A. Rovenstine, of LaPorte. Doctor Rovenstine has accepted a position with the University of Wisconsin.

THE Northeastern Indiana Academy of Medicine met at the Gawthrop Hotel, Kendallville, March 26th. Dr. Howard B. Carroll, of Chicago, presented a paper on "Functional Disorders of the Gastro-intestinal Tract."

DR. HOMER G. HAMER, of Indianapolis, was the guest speaker at the meeting of the Detroit branch of the American Urological Association, February 26th. His subject was "Treatment of Renal and Ureteral Calculi."

THE sixtieth annual session of the American Public Health Association will be held in Montreal, Quebec, September 14 to 17. The Windsor Hotel will be headquarters. Members of the medical profession are invited to attend.

THE Gibson County Medical Society held its regular meeting March 9th at Princeton. Dr. C. A. Miller presented a paper on "Injuries to the Feet and Hands." "Treatment of Pneumonia" was the subject presented by Dr. V. H. Marchand.

THE United States Civil Service Commission announces open competitive examination for social worker (psychiatric) and junior social worker, applications for which positions will be rated as received by the Commission at Washington, D. C., until June 30, 1931.

THE Terre Haute Academy of Medicine held its meeting at the Elks' Club, Terre Haute, March 6th. Dr. Louis H. Clerf, professor of bronchoscopy and esophagoscopy at Jefferson Medical College, spoke on "Bronchoscopy in the Diagnosis and Treatment of Pulmonary Diseases."

THE United States Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer, applications for which positions will be rated as received by the Commission at Washington, D. C., until June 30, 1931.

THE fourth annual meeting of the Indiana Roentgen Society was held in Indianapolis, February 21st. Dr. E. L. Jenkinson, of Chicago, addressed the society. Officers were elected as follows: President-elect, Dr. L. F. Fisher, South Bend; vice-president, Dr. H. C. Bernheimer, Terre Haute; secretary-treasurer, Dr. J. N. Collins, Indianapolis.

DR. B. S. CORNELL, of Fort Wayne, presented some case reports on ulcerative colitis, carcinoma of stomach and hypertension at the March 23rd meeting of the Fort Wayne Medical Society. The March 31st meeting was held at the General Electric Company plant, with the program in charge of Dr. H. W. Garton.

THE third congress of the Pan American Medical Association will be held in the City of Mexico under the auspices of the Mexican Government, from July 26th to 31st. Information concerning the congress may be obtained from Dr. Francisco de P. Miranda, Executive Secretary, Departamento de Salubridad, Mexico, 2.

TWENTY-EIGHT members of the Shelby County Medical Society met February 18th at Shelbyville. An instructive lecture was presented by Dr. Albert E. Sterne, of Indianapolis. At the March 4th meeting of the society, moving pictures describing the life of the cancer cell were shown through the courtesy of the American Society for the Control of Cancer.

THE United States Civil Service Commission announces open competitive examinations for chief nurse (Indian Service), head nurse (Indian Service), graduate nurse (various services), and graduate nurse, visiting duty (various services). Applications for these positions will be rated as received by the United States Civil Service Commission at Washington, D. C., until June 30, 1931.

THE first issue (January) of the *American Journal of Cancer* has been distributed. This new

journal has been founded through the generosity of Mr. Francis P. Garvan, of The Chemical Foundation. The new journal will cover the entire subject of cancer. Inasmuch as the cost of the journal has been covered by funds from The Chemical Foundation, the price will remain $5.00 per year.

The Indiana University School of Medicine held its March seminar in the Auditorium of the Medical School Building, March 27th. Cases were presented by Drs. Edward G. Billings, Frank B. Ramsey, George Garceau, Dwight L. DeWees and Herbert Call. A paper on "Toxicology of 'Jake' Paralysis" was presented by Dr. R. N. Harger. Dr. E. O. Asher presented "Bed Time Story—The Forceps."

Dr. L. G. Zerfas and H. A. Shonler, of Indianapolis, were guest speakers at a joint meeting of the St. Joseph Valley Section of the American Chemical Society and the St. Joseph County Medical Society, held at South Bend, March 11th. "Barbitals" was the subject discussed, Doctor Zerfas dealing with the medical value of the compound and Mr. Shonler discussing the chemical aspects of the subject.

The March sixth seminar of the Indiana University School of Medicine was held in the Medical School Auditorium. Cases were presented by Drs. Edward Billings, Frank B. Ramsey, George J. Garceau, Dwight L. DeWees and Herbert F. Call. Dr. J. A. Badertscher presented a paper on "The Carotid Bulb and Its Relation to the 'Sinus Reflex' of H. E. Herring" and Dr. G. S. Bond talked on the "Diagnosis and Treatment of Cardiac Diseases."

On March 1st, Dr. W. T. Lawson, of Danville, began his fifty-fourth year as a medical practitioner of that city. Doctor Lawson holds the record from point of years of service as a physician in Hendricks county. He has been secretary of the Hendricks County Medical Society for forty years. At the last election the members of the society dispensed with election and made Doctor Lawson secretary of the society for life. He has served as health officer in Danville for many years and now is serving his third term as county coroner.

The United States Civil Service Commission announces open competitive examination for principal social worker (psychiatric), applications for which position must be on file with the Commission at Washington, D. C., not later than April 22, 1931. Examination is to fill vacancies in the United States Public Health Service. Entrance salary is $3,000 per year. Full informaiton may be obtained from the secretary of the United States Civil Service Board of Examiners at the post office or customs house in any city or from the United States Civil Service Commission, Washington, D. C.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the A. M. A.:

Health Products Corporation:

Marine Liver Extract (White).

Schering Corporation:

Iopax.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1930, p. 477):

Chas. Pfizer & Co.:

Cinchophen-Pfizer.

G. D. Searle & Co.:

Ampules Sodium Thiosulphate (Searle) 5 cc.+

Ampules Sodium Thiosulphate (Searle) 10 cc.+

INDIANA UNIVERSITY NEWS NOTES

The Phi Rho Sigma professional medical fraternity at Indiana University announces the pledging of Fred and Frank Peacock, Darlington; J. E. Lang, South Bend; Aubrey Williams, Fort Wayne; and Philip Kurtz, Indianapolis.

The executive committee of the James Whitcomb Riley Hospital for children at Indianapolis has received an anonymous cash gift of $15,000 to be devoted to the use of the hospital. The gift was made with the understanding that the name of the donor be withheld.

Mrs. Ethel P. Clarke, director of the Indiana University Training School for Nurses at Indianapolis, attended the second national biennial convention of Sigma Theta Tau, national honorary sorority for nurses, held last month at the Washington University Hospital Training School, St. Louis, Missouri.

Prof. A. G. Pohlman, former professor of anatomy at Indiana University and now director of the department of Anatomy of the University of St. Louis, spoke Tuesday, March 10th, before the Sigma Xi honorary science fraternity at Indiana University. Doctor Pohlman spoke on "Applied Morphology of the Auditory Apparatus."

Dean Burton D. Myers of the Indiana University School of Medicine at Bloomington spoke March 21st before the Vigo County Child Health Conference on the subject, "Community Health Responsibility for Child Health Program." Dean Myers addressed an I. U. Extension class in Fort Wayne March 9th on the subject, "The Social Responsibility of the Medical Profession."

DR. HERMAN H. YOUNG, for ten years professor of clinical psychology at Indiana University, died Saturday, February 21st, at the Robert W. Long Hospital, Indianapolis. Doctor Young was known widely for his work among children in the James Whitcomb Riley Hospital in Indianapolis. He was a specialist in the correction of speech impediments and mental disturbances resulting in inability to talk. All cases at the hospital involving the practice of clinical psychology came under his personal supervision.

A SHORT course for the benefit of practicing physicians of Indiana will be conducted this summer by the Indiana University School of Medicine at Indianapolis. The course will begin June 16th and last for six weeks. During this time unusual clinic and laboratory facilities will be available for these courses and opportunity will be offered for graduate study. In addition to the eight regular courses to be offered during the short term, clinics will be held in the following subjects: Dermatology, genito-urinary, ophthalmology, rhinology, otology and laryngology. Ample clinical material in both hospital and dispensary patients will be available for these clinics. Regular courses will be given in current problems in biochemistry, pharmacology, physical therapy, general pathology, disease production and resistance, nutrition course, obstetrics clinics and obstetrics surgery and medical ward visits.

THE service records for the three Indiana University hospitals at Indianapolis during the month of February show that 3,433 patients were cared for as compared with 2,637 patients during the corresponding month of last year. Twenty-eight hundred and twenty-two of these were out-patients while 611 were bed-patients confined to the hospitals. The total number of out-patients February of 1930 was 2,080 and bed-patients 557.

The Riley Hospital for Children led in patients served last month, with a total of 1,585—1,433 out-patients and 152 bed-patients. The Riley Hospital during February of last year served 1,291 patients. The Long Hospital came second last month with 1,022. Eight hundred and sixty-five of these were out-patients and 157 bed-patients as compared with 682 during February, 1930. The Coleman Hospital for Women last month had 826 patients, 524 out-patients and 302 bed-patients.

The combined daily patient average at the three hospitals for February of this year was 398.55 as compared with 363.91 for February, 1930.

THE following students of the Indiana University School of Medicine have been initiated into the Phi Chi professional medical fraternity: C. B. Collins and Wallace Buchanan, Indianapolis (both students of the Indianapolis division of the medical school); F. H. Coble, Richmond; R. W. Dixon, Anderson; M. B. Tucker, Claypool; G. W. Willison, Dale; J. R. Surber, Muncie; T. M. Miller, North Judson; J. T. Waldo, Indianapolis; R. E. Hill, Muncie; F. R. Mallott, Converse; J. K. Tower, Leavenworth; V. K. Pancost, Elkhart; Melvin Durkee, Evansville; J. H. Combs, Kollen; D. W. Paris, Kokomo; George Brother, Rockport; J. L. West, Indianapolis; A. M. Haswinkle, Indianapolis; J. M. Young, Indianapolis; R. W. McElroy and J. S. McElroy, Scotland; E. E. Richards, Covington; W. E. Sutton, Cambridge City, and G. A. Peters, Frankfort. Dr. E. T. Thompson, administrator of the I. U. medical school and hospitals at Indianapolis, and Dr. H. M. Banks of the I. U. medical school staff at Indianapolis, also were initiated into Phi Chi. Initiation services were held February 28th at the Marott Hotel in Indianapolis and after the initiation a formal dance was held for all members of the fraternity.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION

REPORT OF LEGISLATIVE COMMITTEE OF THE INDIANA STATE MEDICAL ASSOCIATION

March 27, 1931.

As far as the physician in active practice is concerned his professional status is not changed a bit by any action of the 1931 General Assembly. The lien bill in automobile accident cases, in which the profession was interested, was caught in the last-minute senate jam due to the fact that it was not handed down until near the close of the session by the Speaker of the House. When this bill was handed down finally by the Speaker, it passed overwhelmingly 83 to 7. Your committee felt that it had enough votes in the senate to pass the bill had time permitted.

This bill, if enacted, would have relieved to a degree physicians, nurses and hospitals from losses suffered for services rendered but not paid for in automobile accident cases. Your committee feels that as a result of the general support which the bill received in the House, perhaps arrangements can be made with the insurance companies for a better understanding in these cases. At any rate your legislative committee will be prepared to begin the battle all over again for this much-needed legislation next session.

The results of the other major bills of interest to the profession follow:

(1) The "full-time health officer" bill did not get out of committee.

(2) The tuberculosis sanatoria bill was defeated in the House, where it was introduced.

(3) Bills changing present laws in regard to medicinal liquor were defeated.

Two bills sponsored by allied professions were passed—one providing for a reregistration of nurses and another giving the dentists an injunction similar to the one in the medical law. The dental bill had to be amended artistically so as to do away with objections of the advertising dentists before it was passed.

No Cult Legislation. The outstanding feature of the legislature so far as the medical profession is concerned is the fact that this is the first year in more than a decade that the cultists have not attempted some legislation. This fact alone shows the strong position of the medical profession in legislative circles.

Signed by Governor. The following bills which are of particular interest to the medical profession were introduced during the past session of the legislature and were signed by the governor:

H. B. 220—Introduced by Representative I. N. Trent, M.D., Delaware county, providing for the sexual sterilization of idiots, imbeciles and morons committed to institutions for those so afflicted, when found probably capable of producing mentally incompetent offspring, on order of court. Such operation is to be performed under direction of institutional superintendent.

H. B. 478—Introduced by Rep. Charles J. Allardt, St. Joseph county. Amends 1921 act regulating municipally owned hospitals to include South Bend.

H. B. 163—Introduced by Rep. D. L. McKesson, Marshall county, and Rep. J. F. Smith, Tippecanoe county. Dental bill. Asks recourse to court injunction to prohibit unlicensed dentists from practicing in Indiana, and makes other minor amendments in dental practice act.

S. B. 69—Introduced by Sen. Russell P. Kehoe, Clark, Jefferson, Ohio and Switzerland counties, and Sen. G. R. Slenker, Carroll, Clinton and White. Gives judges right to determine whether insane may be sent to state or federal government hospitals.

S. B. 96—Introduced by Sen. Thurman Gottschalk, Adams, Wells and Blackford. Nurses' bill. Requires the annual registration of registered nurses and trained attendants and the payment of an annual fee of $1.00 and of 50c, respectively.

H. B. 485—Introduced by Reps. J. H. Monnig, Vanderburgh, and H. P. Kenney, Floyd. Boxing commission bill. Creating a board of three members to be named by the governor. Requires medical examination of contestants by a physician of five years' practice in the state. Requiring physician to sign a written report and providing that a fee be paid the physician doing such work. Examining physician to be named by commission.

S. B. 266—Introduced by Edgar Perkins, Marion. Includes foods, medicines and dairy products among products upon which manufacturing firms and corporations must place labels and names on containers significant of trade marks or names.

Failed to Pass. The following bills that had more or less of a bearing on the profession failed:

H. B. 32—Introduced by Reps. H. P. Kenney, Floyd, and M. J. Furnas, Randolph. Tuberculosis sanatoria bill which provided for the ultimate construction in Indiana of nine sanatoria and as originally drawn carried a six-mill tax levy. Failed in House, 37 to 46.

H. B. 69—Introduced by Rep. G. M. Bates, Marion, establishing regulations governing the advertising, sale and use of patent medicines. Failed to come out of committee.

H. B. 72—Introduced by Reps. F. S. Galloway, Marion, and Fred A. Egan, Lake. Repealed the Wright "bone dry" law. Failed to come out of committee in the House.

H. B. 219—Introduced by Howard Grimm, DeKalb, and R. W. Smith, LaPorte and Starke. Automobile lien bill. Proposing to accord liens to hospitals, physicians and surgeons, nurses and undertakers performing services for persons who have suffered personal injuries on any settlements or judgments obtained by the injured persons or their representatives by reason of these injuries. Passed House 83 to 7. Failed to get out of committee in Senate.

H. B. 259—Introduced by C. J. Kistler, Elkhart, and R. W. Smith, of LaPorte and Starke. Barbers' license bill, creating a barbers' board of three examiners. Never reported from house committee.

H. B. 408—Introduced by C. J. Kistler, Elkhart, and R. W. Smith, of LaPorte and Starke. Another barbers' bill. Similar to H. B. 259. Passed House 87 to 10, but died in Senate committee.

H. B. 262—Introduced by C. O. Schlegel, Clay county. Giving hospital trustees authority to collect costs of treatment for indigent patients from township trustees. Sponsored by Indiana Hospital Association. Withdrawn.

H. B. 279—Introduced by J. H. Monnig, Vanderburgh, and F. A. Egan, Lake. Medicinal liquor bill. Indefinitely postponed in the House.

H. B. 304—Introduced by E. C. Simpson, Perry and Spencer, and H. H. Evans, Henry. Authorizes a court or jury to order the sexual sterilization of any person convicted of murder, burglary, robbery, banditry, arson, rape, or the commission of any other felony in which life is threatened or destroyed. Passed 58 to 32 in House; postponed in Senate.

H. B. 361—Introduced by Tella C. Haines, Sullivan. Beauty parlor bill. Regulates the practice of cosmotology and provides for a state board of cosmotology. Passed in the House; died in the Senate.

H. B. 342—Introduced by H. C. Bennett, Dearborn and Ohio. Provides that the State Board of Health issue licenses and regulate the sale of wood alcohol and other poisonous liquids. Postponed in the House.

H. B. 480—Introduced by J. B. Kuespert, St. Joseph county. Amendatory measure making it unlawful in cities of more than 200,000 population for such cities to establish or maintain pest houses within 1,500 feet of any hospital or school building or within 500 feet of residences. Present law applies to cities of 100,000 or more population. Passed in House, 77 to 0, but died in Senate committee.

H. B. 246—Introduced by J. F. White, Marion county. Provides that in every city of 3,000 or more population the Board of Health shall make medical inspection from time to time of all persons attending or employed in public, private, or parochial schools. Indefinitely postponed on second reading in House.

H. B. 497—Introduced by Reps. J. G. Ellyson, Lake, Ward G. Biddle, Monroe, and C. J. Kistler, Elkhart. Authorizes cities of second, third, fourth and fifth classes to establish a department of public sanitation. Passed 85 to 1 in House. Lost in Senate after being amended.

H. B. 522—Introduced by C. B. Braughton, Marion. Prohibiting use, possession and sale of opium, coca leaves, cannibus indica, or sativa, and authorizing search warrants. Remained in committee.

H. B. 541—F. S. Galloway, Marion. Another medicinal liquor bill. No action.

S. B. 90—Introduced by Sen. R. N. Walter, DeKalb, LaGrange, Steuben. Full-time health officer bill. Withdrawn.

S. B. 284—Introduced by C. O. Holmes, Lake, and R. N. Walter, DeKalb, LaGrange, Steuben. Full-time health officer bill, similar to S. B. 90. Did not come out of committee.

S. B. 324—Introduced by J. C. Sherwood, Lawrence, Martin and Orange, Roscoe Martin, Cass and Fulton, and Edgar A. Perkins, Marion. Fixing an eight-hour work day for trained and student nurses except in cases of emergency. Reached second reading in Senate.

By The Legislative Committee,
J. H. Hewitt, M.D., Chairman,
O. T. Scamahorn, M.D.,
W. F. Carver, M.D.,
Walter F. Kelly, M.D.,
A. A. Young, M.D.
George E. Denny, M.D.,
M. F. Johnston, M.D.,
L. J. Danieleski, M.D.
Thomas A. Hendricks,
Executive Secretary.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

Monthly Report, March, 1931

Disease reports were received from every county in the state except Brown. No word from Brown county is normal. There were 6,298 cases of sickness reported during the month, 3,844 cases from the urban and 2,454 cases from the rural population. The prevalence of most of the important communicable diseases, as indicated by the reports from the health officers of the state, are summarized below:

Measles is the most prevalent disease reported, 3,026 cases. An increase over last month when 2,720 cases were

reported. Perhaps the five-year cycle is beginning. Five years ago, March, 1926, 6,948 cases were reported. The general attitude of the public is not serious enough toward the disease. If the same consideration were given to measles as to diphtheria or typhoid fever, a different story could be written. In the period referred to above, March, 1926, eighty-two deaths occurred; diphtheria, fifteen deaths; typhoid fever, eight deaths.

Scarlet Fever. The incidence of the disease shows a slight decline over the previous month; 1,347 cases were reported and 1,407 cases last month. The corresponding month the preceding year, 961 cases. The estimated expectancy was 922 cases. The estimate is based on the experience of the last seven years. The disease will decline as the warm season approaches.

Typhoid Fever. A one-case increase is shown, six cases last month. Four of these seven cases were from the southern part of the state, the drought area. There were twelve cases of the disease reported for March of last year, six cases in the south and six cases in the north. This ratio will apply to all other diseases. The drought has not been a factor in the prevalence of disease.

Diphtheria. A noticeable decline of the disease is shown by the reports over the previous month, 124 and 174 cases, respectively. This is not far off the normal trend. The expectancy for the period, seven years, is 136 cases.

Smallpox. During the current month, 447 cases were reported. The previous month 432 cases. Compared with the same period the preceding year, 781 cases this year shows a marked decline. The normal average for the seven-year period is 549 cases. It seems that smallpox is here to stay. It is not necessary to say, why?

Poliomyelitis. Five cases were reported the current month. The report for the previous month was a negligible quantity. Five cases in March is the greatest for this month in the seven-year period. The average is one case. The disease occurs principally in the late summer and early autumn.

Influenza. The incidence shows nearly a fifty percent decline over the previous month, 228 cases as against 460 cases. The greatest number of cases reported in March was in 1926 when 1,432 cases were reported. It is only by the reports that the prevalence of the disease can be calculated. Most of the cases reported are from the rural population. The larger cities of the state do not report their cases. No doubt the disease is more prevalent than the reports indicate. Influenza is considered much like measles. It is a serious disease, especially on account of the many complications following the disease, and is, like smallpox, perennial.

Meningococcus Meningitis. The incidence of the disease shows an increase over last month, 37 and 20 cases, respectively. In comparison with the same period last year, eighty-nine cases were reported. The epidemic of the disease in 1930 was the greatest ever known in Indiana as our records show. 462 cases were reported for the year. The estimated expectancy, except last year, was forty-two cases. This estimate is based on our experience of the last eight years.

H. W. McKane, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

WOMAN'S AUXILIARY

Women at the A. M. A. Meeting,

Philadelphia, June 8-12, 1931.

The Woman's Auxiliary to the American Medical Association has been placed in charge of all entertainment of women visitors, and began its labors on June 27, 1930, by engaging the whole roof garden of the Bellevue-Stratford Hotel for the period of the convention. All women's activities will center in this hotel—registration, meetings, luncheons and supper dance, and all excursions will start from the Broad Street entrance. Invitations and tickets must all be procured in the Roof Garden *in advance,* as nothing but programs will be obtainable elsewhere. Members of the A. M. A. are invited to join all excursions, and should register for them in advance in the Roof Garden. Rooms for state headquarters have also been reserved in the hotel, and sponsors will be appointed to look after all women registered from their own states. The list of sponsors will be printed in the program. We take this opportunity to thank the management of the Bellevue for their generosity in placing all these facilities at our disposal free of charge. The chairman of the Women's Hotel Committee is Mrs. Frederick S. Baldi, 2117 Porter Street, Philadelphia, who will be glad to make any desired reservations.

The Convention will open with a subscription buffet luncheon in honor of all National Auxiliary presidents from Mrs. Red to Mrs. McGlothlan, immediately followed by three round tables of thirty-five minutes each, with ten-minute intermissions, each under expert leadership. The subjects will be:

1. Programs for County Auxiliary Meetings.
2. The Technique and Value of a Committee on Public Relations.
3. History and Archives.

These informal gatherings will be a sort of preliminary canter, designed to bring together those interested in special phases of Auxiliary work and give them opportunity to discuss the subject thoroughly during the following days. The National Board dinner and pre-convention meeting are scheduled for Monday evening.

A new and, we hope, helpful feature will be a Question and Suggestion Box to which we beg all with good ideas to contribute. This seems the most practical way of finding out what our members want continued, what discarded, and what plans are indicated for the future.

The regular business sessions will be held on Tuesday and Wednesday mornings. National chairmen will be allowed ten minutes for their reports, state presidents three minutes. Reports to be printed may be as long as desired (in reason), but let no one reporting on the floor imagine these limits an idle jest. Nor will the hours announced on the program be found to mean "about." Have your watches cleaned and regulated, and practice your wrist drill before leaving home. You will need it.

Thursday morning too will be a busy one, the post-convention Board meeting, a special meeting for state and county treasurers desiring further elucidation of the treasurers' receipt blanks, and at 10:30 an informal round table presided over by the new president, the subject "What Have I Gotten Out of the Convention?" At this meeting Mrs. McGlothlan will announce her committee chairmen and outline her plans for the coming year, and the subjects in the Question Box will be discussed, a sort of stock taking, closing the year's business and opening the new books.

Philadelphia as an historical and cultural center is the keynote of the entertainment planned for our guests. Except Monday, all afternoons and evenings will be devoted to pleasure, and a variety of excursions is offered to suit all tastes, all physiques, and all weathers. They include bus trips to Valley Forge and to Longwood, the beautiful estate of Mr. and Mrs. Pierre S. du Pont, a boat trip on the Delaware, and visits to the Fairmount and Rodin Museums and to the Historical Society of Pennsylvania. The Museum authorities are delighted to provide decent service for those desirous of more than a passing glance at their treasures, and the Historical Society will arrange a special exhibition for the week, including portraits, prints and engravings, documents, silver, etc., from its unsurpassed collection of Americana. There will also be a brief historical address by Dr. Charles W. Burr, of Philadelphia.

Wednesday will be a field day—the big Auxiliary luncheon, with guests and speakers from the A. M. A. and a beautiful musical program, the gift of the Delaware Auxiliary. In the afternoon the Philadelphia County Medical Society invites the women to be their guests on a bus trip through historic Philadelphia (a ten-minute

stop at Independence Hall), Fairmount Park and Germantown to "Stenton," where the New Jersey Auxiliary invites us all to tea. "Stenton," the home of James Logan, Penn's friend, secretary of the colony, still stands just as it was built in 1728, the furniture of the period, the garden laid out as described by contemporaries. On Wednesday evening the Pennsylvania Auxiliary invites all visiting ladies to a reception in the superb Chinese Rotunda of the University Museum, a setting probably unsurpassed in any museum anywhere.

This meeting of the A. M. A. in Philadelphia is the first in thirty years, and the County Medical Society, desiring to mark so auspicious an occasion, and also in appreciation of the work of the Auxiliary, invites all members of the A. M. A. and the visiting ladies to be their guests at a supper dance in the Ballroom of the Bellevue, following the big meeting of the A. M. A. on Tuesday evening at the Academy of Music. The president's ball at the Benjamin Franklin Hotel on Thursday evening, to which all are invited, will close the formal festivities.

To those still able to rise from their beds on Friday morning there are offered a tour of Wanamaker's with luncheon in the Crystal Tea Room, or an all-day bus trip to Atlantic City, where the New Jersey Auxiliary will meet them for luncheon at the Claridge. This program includes also a visit to the new Convention Hall, an hour in a chair on the Boardwalk and plenty of time for window shopping or a swim.

And, finally, every day and all day there will be a booth in the Roof Garden inscribed "As You Like It." Anywhere, where those wishing to golf, shop, go to Garden Days, or carry out any other pet project not elsewhere provided for may find information and assistance in making a profitable use of their opportunity.

Will you not reward our efforts by the largest and most enthusiastic women's attendance in the history of the American Medical Association?

Corinne Keen Freeman,
General Chairman.
(Mrs. Walter Jackson Freeman.)

After reading Mrs. Freeman's letter to the Women of the Auxiliary regarding the annual meeting of the American Medical Association in Philadelphia, June 8-12, I am sure no one will doubt that a wonderful program has been arranged. The Auxiliary is now established and its proceedings are a vital factor to the American Medical Association. The doctors want us and our hostesses have certainly shown our presence is desired. Let us not disappoint them. All women attending the Convention, whether Auxiliary members or not, are invited to participate in this entire program. We want to know you as we feel sure all eligible will become future members. If further information is desired we will be glad to furnish it. The Auxiliary Department in the *State Journal* and *Bulletin* will supplement information regarding the Convention.

I should like to urge that our members see that the *Medical Journal* is sent to the homes and that they read it. There are many interesting and enlightening original articles and editorials, as well as correspondence that will stimulate an interest in the Auxiliary. It is interesting for one county to know what the other is doing and helpful as well, so I suggest that each county report its activities regularly to Mrs. D. O. Kearby, chairman of Press and Publicity, to be published in our State Medical Journal. Indiana is fortunate in having as the editor of its Journal a man with such clear vision and forceful pen as has Doctor Bulson.

I am looking forward with much pleasure to seeing the Woman's Auxiliary to the Indiana State Medical Association well represented at the annual meeting in Philadelphia, where I hope to meet and greet you.

Sincerely yours,
Mrs. William S. Tomlin.

VANDERBURGH COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Vanderburgh County Medical Society was held Tuesday, March 10, 1931, at the Public Health Center, Evansville. Dr. Wm. G. Downs, Jr., assistant professor of pathology at the Yale University School of Medicine, gave an excellent talk on "A Newer View on Dental Diseases." Doctor Downs' talk was illustrated by moving pictures. A large number of dentists were in attendance at the meeting.

It may be of considerable interest to the physicians of other cities who are contemplating establishing a "collection agency" to learn that the "collection agency" organized by the physicians of Evansville was discontinued. The difficulty in securing a competent manager in addition to the world-wide business depression were the principal factors in the failure of the Bureau at Evansville.

Keith T. Meyer,
Secretary-Treasurer.

AUXILIARY TO VANDERBURGH COUNTY MEDICAL SOCIETY

A very lovely tea was given at the home of Mrs. W. E. Barnes, 604 College Highway, Evansville, Indiana, retiring treasurer of the Vanderburgh County Auxiliary.

The new officers were installed and are as follows: President, Mrs. L. E. Fritch; first vice-president, Mrs. Wallace Dyer; second vice-president, Mrs. O. C. Stepans; corresponding secretary, Mrs. Jess R. Logan; recording secretary, Mrs. W. C. Caldwell; treasurer, Mrs. Harmon L. Stanton.

On February 10th, the Vanderburgh County Tuberculosis Association and Vanderburgh County Medical Association met with the Woman's Auxiliary at the annual joint meeting, which was very enjoyable and instructive. Dr. Stuart Pritchard, of Battle Creek, Michigan, was the speaker. He flew from Battle Creek, piloting his own machine.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its regular meeting Tuesday, February 24, 1931, in the Public Library at South Bend with President Lyon in the chair. The application for membership of Dr. Walter C. Sarber, of Argos, was read and referred to the Board of Censors. Dr. R. M. McDonald, of Mishawaka, and Dr. L. L. Frank, of South Bend, were elected to membership unanimously. The paper of the evening was given by Dr. T. C. Eley, of Plymouth, on "A Group of Clinical Case Reports."

Case I. Fibrosis of Uterus. A single girl, eighteen years, had excessive menstruation for past year. Vaginal examination revealed large cyst of right ovary which was removed and a modified Gillian suspension of uterus done. Recovery uneventful. Two months later excessive menstruation returned with enlarged uterus. Curettement of uterus was followed by clearing up of symptoms for two months, when again excessive hemorrhage occurred. The uterus at this time was the size of a four-month pregnancy. Radium was used to control hemorrhage and after preparing patient with the necessary blood transfusions a complete hysterectomy was done. Following the laboratory report a diagnosis of fibrosis of the uterus was made.

Case II. Pachymeningitis. A single girl, aged twenty-three, complained of severe, intense headache for about one week. After eliminating possible trouble from eyes and sinuses a lumbar puncture and analysis of spinal fluid revealed a pachymeningitis. A second lumbar puncture was necessary before headaches entirely cleared up.

Case III. Perforation on the anterior surface near pyloric end of stomach. Male, aged forty-one, had for a year recurring attacks of upper abdominal pain localized slightly to right of midline. Six weeks ago while cranking a car had an attack of severe pain in the pit of stomach which lasted several hours. He vomited every day and for two weeks was unable to retain even fluids. X-ray of stomach with barium meal showed irregularity along

greater curvature, peristalsis very slow, stomach mobile, evacuation very slow and only seen on marked pressure. Concluded some obstruction at pyloris. Patient improved under glucose and calcium given intravenously and glucose and normal salt by rectum. On opening abdomen found peritoneum covered with fibrinous exudate matting down stomach, transverse colon, liver and gall bladder. Wall of pyloric end of stomach was thickened and on anterior surface near pylorus was a perforation through the base of an indurated ulcer. Operation, posterior gastroenterostomy. Patient had an uneventful recovery.

These most interesting cases were discussed by Doctors Sensenich, Giordano, M. W. Lyon, McMeel, Allen, Wilson, Birmingham, Greene, Miller, Fisher and Doctor Knott, of Plymouth.

The St. Joseph County Medical Society met Tuesday, March 3, 1931, in the Public Library with President Lyon in the chair. The paper of the evening was given by Dr. John D. Skow on "Cathartics." Doctor Skow's summary was as follows: (1) The promiscuous advertising of cathartics in the lay periodicals and newspapers and their advised use by the medical profession has resulted in a conception by the average layman that the frequent use of cathartics can do no harm. (2) The pernicious habit of resorting to the use of drugs to secure a daily stool is a common source of constipation and should be discouraged. (3) Part of the blame must rest on the medical profession, due to insufficient history of the patient's complaints coupled with too little instruction by the physician in dietary and hygienic measures for the control of constipation. (4) The purge is still too frequently used for preoperative and postoperative treatment at a time when the body is greatly in need of fluids. (5) The use of the purge as a means of abstracting fluids from the system in dropsy cannot be a part of a rational treatment in view of the poor results obtained and the torture to which the water-logged patient is subjected. (6) Overevacuation by purges and large enemas with the subsequent constipation is responsible for starting many in a cathartic or enema habit. (7) The warm oil retention enema should be used more in the treatment of constipation and large water and soap-suds enemas less. (8) A greater effort should be made by the profession in promoting dietary and hygienic measures in the treatment of constipation.

The paper was discussed generally by everyone present.

The second speaker on the program, Dr. M. O. Lundt, of Elkhart, gave a most interesting movie motion picture of his subject, "Prostatic Hypertrophy."

The St. Joseph County Medical Society met with the St. Joseph Valley Section of the American Chemical Society, Wednesday, March 11, 1931, at the University of Notre Dame. Dinner was served in the lay faculty dining-room at 6:45 p. m. and the scientific meeting at 8:15 p. m. in the auditorium of the new Law School Building.

The subject, "The Barbitals" (luminal, veronal, amytal), was considered from two aspects: the chemical side by H. A. Shonle, Ph.D., of the Eli Lilly Co. of Indianapolis, and the clinical side by L. G. Zerfas, M.D., Director of Clinical Research of the Indianapolis City Hospital.

Doctor Shonle gave the chemical formulæ of the different barbital derivatives and charts of their toxicities with lantern slide demonstration.

Doctor Zerfas gave the clinical results of the drugs when tested out on animals; showed wherein the action of the drugs on animals may be different from that upon man; cited the contraindications for giving the drug; the good results from amytal when used in strychnine poisoning, tetanus, hiccough, eclampsia and delirium tremens. He warned against the use of morphine before anesthesia with sodium amytal and closed by stating that the administration of sodium amytal was not devoid of danger.

The papers were discussed by Doctors Lyon, Traver, Giordano, and Messrs. Hinton and Taggart.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

AUXILIARY TO DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY

Miss Nellie Brown, superintendent of nurses at Ball Memorial Hospital, and Mrs. H. K. Thurston, wife of the superintendent of the hospital, entertained the Womans' Auxiliary of the Delaware-Blackford County Medical Society Tuesday evening, February 10, 1931, in the parlors of the nurses' home, which is in connection with the hospital.

Following the dinner a short business session was held with Mrs. Poland, the president, presiding. Forty members were present. Dues were collected amounting to $14.00. The treasurer's report, which follows, was submitted and accepted.

Communications from Mrs. W. F. Tomlin, state president, and Mrs. D. O. Kearby were read and commented upon. The questionnaires from the A. M. A. were distributed among the members. The Jones-Cooper bill was discussed.

Dr. Fred Langsdon, president of the Delaware-Blackford County Medical Society; Dr. Charles L. Botkin, vice-president, and Dr. T. R. Owens, secretary-treasurer, were selected to act as the advisory council for the Auxiliary.

The president then appointed Mrs. W. J. Molloy, Mrs. Clay Ball and Mrs. Hugh Cowing to act as the nominating committee for the officers of the coming year, the election of which will take place at the March meeting, which will be held at the Hotel Roberts, March 17, 1931.

MRS. O. E. SPURGEON,
Secretary.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

A board meeting of the Womans' Auxiliary to the Indiana State Medical Society was held at the Columbia Club, Indianapolis, on March 6, 1931, with Mrs. William S. Tomlin of Indianapolis, state president, as hostess. Those present were: Mrs. William S. Tomlin, state president, Woman's Auxiliary; Mrs. A. B. Graham, Indianapolis, wife of the president of the State Medical Association; Mrs. F. W. Cregor, Indianapolis, of the National Auxiliary; Mrs. E. D. Clark, Indianapolis, historian of the State Medical Auxiliary; Mrs. J. H. Eberwein, Indianapolis, Membership Committee chairman, State Medical Auxiliary; Mrs. E. M. Conrad, Anderson, president of the Madison County Auxiliary; Mrs. W. E. Barnes, Evansville, treasurer of the State Auxiliary; Mrs. C. F. Voyles, Indianapolis, chairman of Legislative Committee of the State Medical Auxiliary; Mrs. D. O. Kearby, Indianapolis, Press and Publicity Committee chairman of the State Medical Auxiliary; Mrs. James C. Carter, Indianapolis, chairman of *Hygeia* of the State Medical Auxiliary; Mrs. Joseph Weinstein, Terre Haute, president of the Vigo County Medical Auxiliary; Mrs. W. E. Tinney, Indianapolis, counselor for the State Medical Auxiliary; Mrs. J. T. Wheeler, Indianapolis, parliamentarian for the State Medical Auxiliary; Mrs. John E. Freed, Terre Haute, secretary to State Medical Auxiliary.

The routine business of the meeting was transacted and the secretary's and treasurer's reports accepted and approved. It was voted to compile a book of the Auxiliary. Mrs. Clark, historian read a part of the history of the organization. Mrs. Cregor gave a talk on Auxiliary work, urging the organization to grow and broaden. Mrs. Tinney brought a message from the Medical Association. They request the Auxiliary to be informed intelligently on medical subjects that we may combat the fads and

quacks of the present day. Our president feels that our delegates to the state meetings should be elected, not appointed. Mrs. Carter, chairman of *Hygeia* work, urged our placing it in public libraries, schools and public places. It is the mouthpiece of the medical profession.

Report from Vigo county was encouraging—a membership list of eighty-five members, of whom eighty-three have paid dues.

A very interesting and instructive board meeting adjourned with a rising vote of thanks to our hostess, Mrs. Tomlin, for our delicious luncheon.

Mrs. John E. Freed,
Secretary.

The following is a brief list of this last year's activities of the Auxiliary to the Medical Society:

Mrs. Ottinger's idea was to have educational tales for the organization. At the October meeting she had an Indiana University professor talk on "The Effect of Chemistry on Civilization." At another meeting an Indianapolis attorney talked on "Medical Jurisprudence," and at our January meeting Thomas Hendricks spoke on the Jones-Cooper bill.

At this last meeting new officers were elected.

There has been a large attendance at all meetings. Twenty new members were added during the year.

AUXILIARY TO THE VIGO COUNTY MEDICAL SOCIETY

February Meeting

Our program offers one bridge party each year. The February meeting was a Valentine bridge tea held at the home of Mrs. O. O. Alexander. Sixty members were present.

It was reported that the secretary, Mrs. Nay, had sent a telegram to our Congressman, Noble Johnson, that our Auxiliary was opposed to the Jones-Cooper bill.

Mrs. W. D. Asbury,
Press and Publicity Chairman,
Terre Haute.

BOOK REVIEWS

Books Received:

The Surgical Clinics of North America. Chicago Number—February, 1931. Volume 11, No. 1, 225 pages with 72 illustrations. Paper, $12.00; Cloth, $16.00 per clinic year, February to December. W. B. Saunders Company, Philadelphia and London.

Easier Motherhood. By Constance L. Todd. Written for laywomen. 199 pages. Cloth. Price $2.00. The John Day Company, New York.

The Socialization of Medicine. Vol. VII, No. 1 of The Reference Shelf. Reprints of selected articles, briefs, bibliographies, debates and study outlines. By Edith M. Phelps, Compiler. 190 pages. Cloth. Price ninety cents. The H. W. Wilson Company, New York, 1930.

Drifting Sands of Party Politics. By Oscar W. Underwood, formerly U. S. Senator from Alabama. With a Foreword by Claude G. Bowers. 411 pages. Cloth. Price $3.50. The Century Company, New York, 1931.

Book Reviews:

Calcium Metabolism and Calcium Therapy. By Abraham Cantarow, M.D., Assistant Demonstrator of Medicine in the Jefferson Medical College, Philadelphia; foreword by Hobart Amory Hare, B.Sc., M.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia. 215 pages. Flexible binding. Price $2.50. Lea & Febiger, Philadelphia, 1931.

Herewith is presented a concise, readable treatise on calcium physiology and pharmacology. It is designed to meet the requirements of the busy physician who desires to acquire up-to-the-minute knowledge of this subject with a minimum expenditure of time and effort. A reading and an understanding of this excellent little book should do much to rationalize calcium therapy and to militate against empiricism in calcium therapy. Physicians will be grateful to the author for his summation of contemporary knowledge and opinions on this subject.

This flexibly bound volume of 215 pages follows a most logical outline. Primarily it is divided into three parts. Part I, comprising seventy pages, discusses normal calcium metabolism. In logical sequence are dealt with normal calcium requirement, calcium absorption, calcium excretion, maintenance of normal serum-calcium level and functions of calcium. Part II, a division of forty-nine pages, includes a study of abnormal calcium metabolism. First is taken up the antirachitic factor both as to the conditions wherein there is deficiency and the contrasting condition of hypervitaminosis. Secondly the author discusses lucidly abnormal parathyroid function, the physiological background and conditions of hypoparathyroidism and hyperparathyroidism. The third division of the consideration of abnormal calcium metabolism is devoted to disturbances of blood calcium level and partition. Here is included the variations of serum-calcium level in such clinical conditions as nephrosis, nephritis, kala-azar, endocrine disorders, increased CO_2 tension, and polycythemia vera and as well the ionization alterations in bicarbonate tetany, hyperpnœic tetany, gastric tetany and phosphate tetany. There is a most enlightening consideration of alterations of calcium distribution in allergy pulmonary tuberculosis, jaundice and hepatic insufficiency. The author's advice as to the care of the jaundiced patient should prove of value to surgeons. Part III embraces a study of calcium therapy. Here for fifty-eight pages is discussed agents to be employed, dosage, types of administration, the desired pharmacological effects and as well a warning as to untoward effects. In detail is taken up those conditions, as parathyroprivic tetany and maternal tetany, wherein calcium is of specific importance, and lastly there is adequate space given to those conditions where calcium has proved of some benefit as hemorrhage, jaundice, lead poisoning, edema and others. No plates or illustrations are employed; however, an occasional graph or curve is used to further elucidate data given.

The contents of this little book fills a definite need of present-day medical literature: that of the assembling of the accepted and recognized knowledge of calcium metabolism in one readable volume. The sixteen pages of bibliography testify as to the author's care and intellectual effort in the preparation of his material.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

Procaine Borate.—A borate formed by the interaction of *p*-aminobenzoyl-diethylaminoethanol (procaine base) and boric acid. It contains 58.1 percent of *p*-aminobenzoyl-diethylaminoethanol. Procaine borate closely resembles procaine hydrochloride in its actions and uses. When injected subcutaneously, procaine borate exerts a prompt and powerful anesthetic action. It is nonirritant. Its action is enhanced by the addition of a small amount of epinephrine, as in the case of procaine hydrochloride.

Procaine Borate-Searle.—A brand of procaine borate-N. N. R. It is also supplied in the form of ampules procaine borate and epinephrine 1 cc., containing procaine borate-Searle 0.0216 Gm. and epinephrine 0.00017 Gm. in 1 cc. G. D. Searle & Co., Chicago.

LIVER EXTRACT-FAIRCHILD.—A complete concentrate of an aqueous extraction of fresh edible liver, freed of connective tissue, lipoid, and heat coagulable protein. It is marketed in vials, each containing the material derived from 100 Gm. of fresh liver. Liver extract-Fairchild is used in the treatment of pernicious anemia. Fairchild Bros. & Foster, New York.—*(Jour. A. M. A.,* February 14, 1931, p. 529).

MARINE LIVER EXTRACT-WHITE.—A liver extract representing the water soluble fraction obtained from the livers of fish of the Gadus family in a glycerol-water solution. 100 cc. represents fresh liver, 3,027 Gm. (1 fluidounce represents 2 pounds avoirdupois). Controlled clinical observations show that in pernicious anemia rapid improvement may be expected following the administration of marine liver extract-White. Health Products Corporation, Newark, New Jersey.

POLLEN EXTRACTS-ARLCO.—The following pollen extracts-Arlco (New and Nonofficial Remedies, 1930, p. 29) have been accepted: Grass Mixture No. 1 Pollen Extract-Arlco; Grass Mixture No. 2 Pollen Extract-Arlco; Grass Mixture No. 3 Pollen Extract-Arlco; Ragweed Dwarf and Giant Mixture Pollen Extract-Arlco; Ragweed Mixture Plus Burweed Marsh Elder Pollen Extract-Arlco; Spiny Amaranth Pollen Extract-Arlco; Western Water Hemp Pollen Extract-Arlco. Arlington Chemical Co., Yonkers, New York.—*(Jour. A. M. A.,* February 21, 1931, p. 613.)

PROPAGANDA FOR REFORM

PARIOGEN TABLETS.—There has grown up, during the past four or five years, a huge business in the sale of antiseptics and germicides, real or alleged, that are frankly purchased, if not obviously sold, for contraceptive purposes. The term contraceptive is not used in the advertisements; "feminine hygiene" takes its place. "Pariogen Tablets," marketed by American Drug and Chemical Company, of Minneapolis, have been advertised as the "new mode of personal hygiene." An advertisement stated "Pariogen Tablets may be carried anywhere in a purse, making hygienic measures possible almost anywhere, no other accessories or water being required." The advertising has stressed that the tablets are nonpoisonous, but do not declare the composition of the tablets. Some six years ago a reading notice appeared in a medical journal from which it appears that the tablets are essentially tablets of chloramine, U. S. P. By selling these under a proprietary name as a nostrum of essentially secret composition, the company is able to get a price that is out of all proportion to the value of its product.—*(Jour. A. M. A.,* February 7, 1931, p. 458.)

DEATH FROM EXPLOSION OF MIXTURE OF ANESTHETIC GASES.—It has been two years since, at Evansville, Indiana, a tank containing nitrous oxide exploded, killing an anesthetist. Last month a patient died on the operating table in Los Angeles because of the explosion of an anesthetic mixture. Yet the hazard from an explosion of anesthetics is probably less than that of fatally persistent hiccup. It has been pointed out that surgeons and anesthetists need far more to utilize means to prevent postoperative pneumonia than to worry over the hazards of explosions, except of course explosions due to carelessness. In the case of the Los Angeles accident, the patient was given nitrous oxide and oxygen, followed by ether. It has been pointed out repeatedly that a mixture of these gases is explosive. Explosions recorded heretofore appear to have been due to sparks from discharges of static electricity. Various committees of the American Medical Association have reported on precautions that are to be taken towards the prevention of such accidents.—*(Jour. A. M. A.,* February 14, 1931, p. 530.)

BRINKLEY'S BROADCASTING STATION.—The Federal Radio Commission refused to renew the broadcasting license of Station KFKB of Milford, Kansas, operated by John R. Brinkley, because it was operated mainly in the interest of Brinkley and his associates rather than in the interests of the public. Brinkley appealed the case to the courts, but this appeal has been denied.—*(Jour. A. M. A.,* February 14, 1931, p. 547.)

PERTUSSIS VACCINES OMITTED FROM N.N.R.—The Council on Pharmacy and Chemistry reports that pertussis bacillus vaccine was admitted to New and Nonofficial Remedies in 1914 on the basis of what appeared to be acceptable clinical evidence. In subsequent years, when vaccine therapy was at its height, pertussis bacillus vaccine was used extensively and yet critically controlled reports did not become available. In 1928 the Council voted to omit pertussis vaccines with the close of the longest period for which any one was accepted unless in the meantime acceptable evidence for its usefulness in the prevention or treatment of whooping cough became available. No acceptable confirmatory evidence having become available, the Council voted to confirm its decision to omit from New and Nonofficial Remedies all pertussis vaccines.—*(Jour. A. M. A.,* February 21, 1931, p. 613.)

THROMBOPLASTIN HYPODERMIC-SQUIBB OMITTED FROM N.N.R.—Thromboplastin Hypodermic-Squibb is a sterilized extract of cattle brain in physiologic solution of sodium chloride intended for hypodermic injection to increase the coagulability of the blood. The Council on Pharmacy and Chemistry first accepted thromboplastic substances in 1915. Since then little or no additional evidence has developed for the value of these preparations: their intravenous use almost certainly presents dangers, and the Council has become convinced that there is no satisfactory evidence for their effectiveness when injected subcutaneously. In view of this the Council decided, unless new evidence should appear, not to include hereafter in New and Nonofficial Remedies any preparation of this type except for local application. Since Thromboplastin Hypodermic-Squibb is intended for hypodermic or subcutaneous injection, E. R. Squibb & Sons were informed of the action of the Council and asked to submit evidence in support of the value of the hypodermic administration of thromboplastic substance. The submitted evidence did not permit a revision of the Council's conclusion that the hypodermic or subcutaneous administration of Thromboplastin Hypodermic-Squibb or of other thromboplastic substances is not therapeutically valuable and therefore omitted the Squibb preparation from New and Nonofficial Remedies.—*(Jour. A. M. A.,* February 21, 1931, p. 613.)

KOREMLU, A DANGEROUS DEPILATORY.—There has been on the market for some time a depilatory sold under the name "Koremlu Cream," marketed first under the trade name "Kora M. Lublin," more recently under the style "Koremlu Inc.," both of New York City. Acording to the advertising, Koremlu is "guaranteed to devitalize superfluous hair roots on face or any part of the body." From information received it was quite apparent that Koremlu contained thallium acetate. Reports of serious effects of the use of Koremlu Cream have been reported that are typical of thallium poisoning. The A. M. A. Chemical Laboratory analyzed the preparation and concluded that it consisted essentially of an ointment containing approximately seven percent thallium acetate and 9.5 percent of zinc oxide. Doctor Sabourand, who studied the effects of thallium as a depilatory, declared that any ointment containing more than one percent of thallium acetate is dangerous. He cautioned that but small amounts of the one-percent ointment should be used at one time; no limit is given to the amount of Koremlu, which is much stronger, that should be applied.—*(Jour. A. M. A.,* February 21, 1931, p. 629.)

POTASSIUM THIOCYANATE IN HYPERTENSION.—Thiocyanates resemble iodides in their therapeutic effect, but they do not affect the thyroid gland. As with iodides, the action of thiocyanates cannot be explained satisfactorily. The reduction of blood pressure is dependent on the dose. The small dose of 0.1 Gm. (1½ grains) three times daily, frequently fails to produce an appreciable reduction. The large dose, 0.3 Gm. (5 grains) three times a day, reduces blood pressure in a majority of cases, but it is so liable to produce untoward results that such patients must be under careful supervision. The council

on Pharmacy and Chemistry has refused admission of potassium thiocyanate to New and Nonofficial Remedies because it considered the evidence for the drug's therapeutic value inconclusive and published a report giving the limitations of therapy with this drug.—*(Jour. A. M. A.,* February 21, 1931, p. 632.)

Scarlet Fever Toxin.—The Dick scarlet fever toxin is regarded as a safe and efficient immunizing agent against scarlet fever. The main drawback to its use appears to be that several injections, generally not less than five, must be given before such a degree of immunity is established that the subject no longer gives a positive Dick test.—*(Jour. A. M. A.,* February 21, 1931, p. 633.)

O. W. Lilly's Solution, Dental.—From an examination made in the A. M. A. Chemical Laboratory it is quite likely that the preparation contains potassium mercuric iodide and an arsenic compound, such as "Solution of Potassium Arsenite U.S.P." (Fowler's Solution). The product is prepared apparently by one Dr. O. W. Lilly of Welch, West Virginia. It is recommended by the proprietor for Vincent's infection and all other acute, infectious, ulcerative conditions of the gums and oral mucosa, infected sockets, and pyorrhea. It is a pity that a mixture of such potent ingredients may be dispensed under a proprietary name to the patient for pathologic conditions of the oral cavity. If a dentist or a physician desires to have his patient use a solution containing a mercury or an arsenic compound, it should be prescribed according to the individual needs, with full appreciation on the part of both prescriber and patient of its poisonous character.—*(Jour. A. M. A.,* February 21, 1931, p. 634.)

Limitations of Bacteriophage Therapy.—Recent investigations suggest that future therapy with bacteriophage preparations must be limited to certain definite anatomic types of infection. The deductions drawn are that no therapeutic effects whatever are predictable for bacteriophage except under conditions in which local extrabacterial bacteriophage concentration can be raised and maintained. From this it appears that bacteriophage therapy would be a predictable disappointment in erysipelas, furunculosis, pneumonia, pyelitis, cellulitis and bacteremia, and in cystitis except by concentrated irrigation. The use of this therapy would thus be limited to such closed organs as the intestine and to well-capsulated pus cavities.—*(Jour. A. M. A.,* February 28, 1931, p. 693.)

Therapeutic Possibilities of Gastric Mucin.—The gastric mucus aids in protecting the cells from digestive or "erosive" damage by the acid that is poured into the lumen of the stomach when the gastric glands are active. Undue secretion of mucus in the stomach is responsible for lowering of the gastric acidity, just as proteins tend to "bind" free hydrochloric acid. The actual capacity of mucus to produce such an effect has been verified. Mucin prepared from hogs' stomachs was more potent than equivalent amounts of common protein foods such as gelatin, meat and egg white. In a few human patients with definite histories of ulcer and roentgenographic evidence of peptic ulcer the addition of powdered mucin to the ordinary bland diet brought about relief from subjective symptoms.—*(Jour. A. M. A.,* February 28, 1931, p. 693.)

More Misbranded Nostrums.—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Walker's Old Indian Fever Tonic (Bostwick Bros.), consisting essentially of epsom salt, quinine sulphate, a small amount of arsenic, alcohol and water. Zunical (Antonio A. Zuniga), consisting essentially of eggs, creosote, copaiba, sugar and water. C. C. T. Antiasthmatic (Hare) (Shores-Mueller Co.), containing less potassium iodide and sodium bromide than claimed. Rice's Cough Syrup (Rice Chemical Co.), consisting essentially of extracts of plant drugs, including white pine, wild cherry, sassafras and bloodroot, alcohol, glycerin, sugar and water. Oxidine and Tasteless Oxidine (W. S. Kirby), the first consisting essentially of quinine sulphate, cinchonine sulphate, extracts of a laxative plant drug, glycerin, sugar, alcohol and water, and the second consisting essentially of cinchonidine sulphate, oil of peppermint, sugar, alcohol and water. Glykeron (Iglesias & Co.), consisting essentially of codeine phosphate, an ammonium salt, extracts of plant drugs, glycerin, alcohol, sugar and water. Vicine (The Vicine Products Co.), consisting essentially of iron sulphate, small amounts of phosphates, calcium salts and sulphuric acid in water. Neo-Syn (The Neo-Syn Co.), containing acetphenetidin, acetylsalicylic acid, caffeine and starch. Bradfield's Female Regulator (Bradfield Regulator Co.), consisting essentially of extracts of plant drugs, including a laxative, glycerin, alcohol and water. Tanna-Menthol (The Tanna-Menthol Co., Inc.), consisting essentially of potassium iodide, menthol, iodine, tannic acid, glycerin, alcohol and water. Inhalet (The Lobe Manufacturing Co.), consisting essentially of menthol.—*(Jour. A. M. A.,* February 28, 1931, p. 709.)

Vitaglass.—Vitaglass is the trade name for one of many patented ultraviolet transmitting mediums that pass ultraviolet radiations more or less freely. A Bureau of Standards report states that vitaglass of 2.3 mm. thickness has, at a wave length of 3,020 angstrom units, an average transmitting efficiency of nearly 25 percent. More recent tests place the efficiency at 42 percent. Other tests have given an efficiency of 47 percent. The improvement in the manufacture of the product may account for these varying results. The product varies widely from batch to batch. The purchaser of vitaglass should protect himself by contracting with the dealer to furnish glass where transmission shall, after stabilization of exposure, not fall below the efficiency stated. A recent test gave no indication that children attending school in rooms glazed with vitaglass were perceptibly improved over those children who attended rooms glazed with ordinary glass.—*(Jour. A. M. A.,* February 28, 1931, p. 711.)

ABSTRACTS

MASTOIDITIS AND LATERAL SINUS THROMBOSIS IN INFANT

Louis H. Segar and Walter Stoeffler, Indianapolis *(Journal A. M. A.,* Feb. 28, 1931), assert that mastoiditis in children is considered less dangerous than in adults and the urgency for surgical intervention less immediate. The bony cortex in a child is thin and the direction of the inflammation is usually external, causing carious erosion of the cortex and consequent escape of pus under pressure. Occasionally, the mastoid infection extends into the intracranial cavity, probably along the free communication between the lymphatic and blood vessels of the middle ear and mastoid and the interior of the skull, provided by the ununited petrosquamous suture. Because of this relationship, children frequently develop an otitic meningitis or other intracranial complication without evidence that an aural lesion is present. The most important element in the case of an infant observed by the authors was the normal appearance of the right ear drum in the presence of a mastoiditis. There must have been pus under pressure in the mastoid on the third or fourth day of the illness, as the first specimen of spinal fluid obtained on the fifth day contained a large amount of pus, evidence that the sinus thrombosis had formed some time previously and that the infection had spread to the meninges. It is probable that the mastoid infection was present on the first day of the illness, the staphylococcus having been implanted there at the time of the respiratory infection one week previous to the onset of the last illness. Any departure from the normal appearance of the tympanic membrane would have been, in this patient, the only clue to the existing pathologic condition. It seems doubtful that a mastoid operation and ligation of the internal jugular vein on the day of admission would have changed

the outcome. Nevertheless, that procedure would have been indicated had any clue to the mastoid infection been discovered.

THE COSTS OF MEDICAL EDUCATION

From a study of the reports of 1,161 students attending widely separated and various types of medical schools, R. G. Leland, Chicago *(Journal A. M. A.*, Feb. 28, 1931), shows that the cost of medical education to the student for 1929-1930 averages slightly more than $1,100. Tuition and fees and board and room call for 59 percent of the average total expense. Costs seem to be highest in the schools of the New England and Middle Atlantic states and most reasonable in the schools of the Pacific and Mountain states, with the South Atlantic states following closely.

PHYSIOLOGIC MEANING OF COMMON CLINICAL SIGNS AND SYMPTOMS IN CARDIOVASCULAR DISEASE

Carl J. Wiggers, Cleveland *(Journal A. M. A.*, Feb. 21, 1931), asserts that every form of disease may be looked on as an experiment that nature performs on animals or man. The so-called symptoms of disease are nothing more than intensified or depressed reactions which, if not actually in operation, are at least potentially available in the normal organism. No pathologic process in disease is capable of evolving new types of functional reactions. Neither is it capable of exciting or depressing functions that cannot be affected similarly by artificial or natural means in normal organisms. The methods employed by nature in experiments are often cleverly concealed and hence not always fully understood. It is the task of experimental physiology and of experimental medicine to discover the methods chosen by nature and to duplicate the physiologic reactions in experimental animals, where they can be more thoroughly investigated. With such thoughts in mind he analyzes a few common signs and symptoms of cardiovascular disease (tachycardia, palpitation, vertigo, syncope, convulsions and related symptoms, fatigue, dyspnea, orthopnea, cyanosis, oilguria and edema and cardiac pain) in the light of experimental studies, with a view of giving them a clearer meaning or an added significance.

USE OF SPINAL ANESTHESIA IN UROLOGY

Arthur L. Chute, Boston *(Journal A. M. A.*, Jan. 10, 1931), never uses spinal anesthesia for kidney operations, but confines his use of it to operations on the lower part of the urinary tract. He says that there are a few contraindications to the use of spinal anesthesia. A very nervous or mentally unstable patient or one who is strongly prejudiced against its use rarely does well under it. He rarely uses spinal anesthesia in young persons. Besides the 840 times that he has made use of spinal anesthesia in prostatectomies he has made use of it many times for other operations on the lower urinary tract, such, for instance, as operations on bladder tumors, crushing stones, painful systoscopies, fulgurations, closing suprapubic fistulas, as well as in a considerable number of urethrotomies, both internal and external, and in a few cases of urinary extravasation. Few complications were encountered.

INTRADURAL CAUDAL ANESTHESIA IN UROLOGY

George H. Ewell, Madison, Wisconsin *(Journal A. M. A.*, Jan. 10, 1931), urges that it should be the aim of urologists to make cystoscopic examinations and all operative procedures through the cystoscope as painless as possible; better cooperation is obtained from both the patient and the general physician. Caudal anesthesia produces sufficient relaxation of the bladder for complete cystoscopic examination and treatment in all types of cases, the operative procedures are painless, and the work of the operator is greatly facilitated. It also provides a safe and reliable anesthesia for perineal surgery and operations on the external genitals in men, rectal surgery, and perineal plastic operations in women. The method of intradural caudal anesthesia is recommended because of its simplicity and reliability; by a single intradural injection complete sacral block anesthesia can be produced, whereas by the extradural technic the introduction of a needle and anesthetic solution into the sacral canal and into several or all of the eight sacral foramina would be necessary.

INCIDENCE OF BROMIDE INTOXICATION AMONG PSYCHOTIC PATIENTS

Since March, 1928, a determination of the bromide content of the blood serum has been a part of the routine in the examination of all patients admitted to the Colorado Psychopathic Hospital. Carl P. Wagner and D. Elizabeth Bunbury, Denver *(Journal A. M. A.*, Dec. 6, 1930), have made a study of the first thousand consecutive cases so examined. Of the thousand cases examined, 7.7 percent showed bromide in the blood serum in a concentration of 75 mg. per hundred cubic centimeters and over. Of these, thirty-three, or 42.85 percent, had received the bromide on a physician's prescription; fourteen, or 18 percent, had taken "patent" medicines; and in thirty, or 38.95 percent, the source of the drug remained undetermined, but undoubtedly these patients had also taken "patent" medicines, although most of them denied that they had taken medicine of any kind, even when they were confronted with the fact that their illness was due to drug intoxication. In seventeen, or 22.08 percent, admission to the hospital was sought entirely on account of drug intoxication. Most of these patients recovered before or shortly after leaving the hospital. However, two cases terminated fatally, and in these death was due to the indiscriminate use of bromides only. Both of these patients showed a bromide concentration of over 300 mg. per hundred cubic centimeters of blood. On admission, both had been under the care of a physician and had been taking bromide on prescription. Five other cases terminated fatally. One of these, a patient with dementia paralytica, showed only 75 mg. per hundred cubic centimeters, and the authors do not feel that the bromide contributed toward his death. The four remaining patients, one with cerebrospinal syphalis, one with senile dementia, and two with cerebral arteriosclerosis, died of cardiac decompensation. In these the bromide contributed toward their death in that the excitement due to delirium aggravated the decompensation. The authors assert that undesirable mental symptoms can be reduced to a minimum if the physician will be on the outlook for exacerbation of mental symptoms during bromide administration or if he is willing to make determinations of bromide concentration in the blood. Special care should be exercised in the administration of bromide in cases of organic nervous disorders, particularly those in which the excretory or circulatory functions are impaired.

PATHOLOGY OF MALIGNANT BLADDER NEOPLASMS

Harold D. Caylor, Bluffton, Indiana *(Journal A. M. A.*, Dec. 6, 1930), asserts that so-called papillomas of the urinary bladder should not be considered as benign lesions but as low grade papillary epitheliomas of the bladder, for they bear the same relationship to epitheliomas of the bladder as grade 1 squamous cell epitheliomas

of the lip, for example, bear to the more malignant grades of epitheliomas in this organ. The grading of bladder epitheliomas, as devised by Broders, is described, illustrated and discussed. The importance of the removal of specimens from bladder epitheliomas as a diagnostic procedure is noted. The possibility of using diagnoses made from biopsy specimens as a basis for the development of a plan of treatment of bladder epitheliomas is emphasized and discussed. Some salient features of less common malignant lesions of the bladder are mentioned.

GALLSTONES IN INFANCY

A. A. Skemp, La Crosse, Wisconsin *(Journal A. M. A.,* Jan. 10, 1931), relates the case of a child, aged 17 months, who took sick with convulsions and died about six hours after the onset of the convulsions. Permission for a postmortem was obtained and an extensive pneumonic process involving the lower part of the left lung was found. The abdomen was normal except that the gallbladder was slightly distended and contained stones. The gallbladder contained numerous stones, the largest from about 5 to 10 mm. in diameter. Prior to its death, the child had had no digestive disturbances and had all the appearances of a healthy and vigorous child. It had been breast-fed and from the time of its weaning until its death there was nothing unusual in the dietary.

DUST AND PULMONARY DISEASE

Albert E. Russell, Washington, D. C. *(Journal A. M. A.,* Dec. 6, 1930), says that in the intelligent consideration of dust as an etiologic factor in pulmonary disease, the following points must be taken up: 1. The chemistry of dust. 2. Its concentration. 3. Petrography; the size of its particles. 4. The length of exposure to it. 5. The effects produced: (*a*) morbidity; (*b*) physical condition: (*c*) mortality. He discusses each in detail. He concludes that morbidity and mortality records indicate that workers exposed to dust have excessive rates of respiratory diseases and that inorganic dusts produce more pulmonary disability than organic dusts. Silica (SiO_2) of the crystalline variety (quartz) is the element in dust which produces greatest pulmonary damage, and it is present in varying extents in most industrial dusts. Silicosis is insidious in its onset and progress and presents but few symptoms or physical signs in its early stages. Silicosis is almost invariably complicated by tuberculosis after a number of years of exposure, the time depending on the concentration of the dust and the percentage of free silica which it contains. Latent tuberculosis in persons entering dusty trades is activated usually after shorter exposure to siliceous dust and has more characteristics of the disease. Before a dusty trade can be absolved of its danger or stamped as dangerous, the concentration of dust and its chemical and petrographic analysis must be shown. Masks frequently give a false sense of protection. Removel of dust at its source is preferable. There has been a great reduction in the death rate from tuberculosis among the general population during recent years, while among workers in dusty trades there has been a great increase during the same time in the death rate from this cause.

REACTION OF CONTENT OF GASTRO-INTESTINAL TRACT

Frank C. Mann and Jesse L. Bollman, Rochester, Minnesota *(Journal A. M. A.,* Dec. 6, 1930), have developed a method for repeatedly securing, under normal physiologic conditions, specimens of the gastro-intestinal content at various levels of the tract. Estimation of the acidity in the fasting animal showed that the gastric juices are usually strongly acid, *p*H 1.5 to 2.0, but may be at times almost neutral. The content of the duodenum, jejunum, ileum and colon is usually found to be alkaline, *p*H 7.0 to 8.0, with the exception that the content of the duodenum may be found to be acid when highly acid values are found in the content of the stomach. Following a meal, the acidity of the content of the gastro-intestinal tract depends largely on the development of acid in the stomach. Short periods of high acidity of content are common in the duodenum and less common in the small intestine, the greater the distance from the pylorus. The usual reaction in the small intestine, after a meal, is close to neutrality, *p*H 6.5 to 7.5. The content of the colon is usually slightly alkaline but may be slightly acid, especially following a meal rich in carbohydrate. Dietary measures may greatly alter the acidity of the content of the gastro-intestinal tract.

PREGNANCY AND TUBERCULOSIS

Harvey B. Matthews, Brooklyn, and Louise Stevens Bryant, New York *(Journal A. M. A.,* Dec. 6, 1930), sent a questionnaire to 1,000 married women graduates of Trudeau Sanatorium, inquiring as to their experience with child-bearing. Nearly half responded, 484 in enough detail to make possible certain comparisons and observations, which are presented. One-third of the 484, or twice the highest figure set for involuntarily sterile marriages, never became pregnant. (Estimates for involuntarily sterile marriages range from one in six to one in ten.) The other two-thirds proceeded with caution. They became pregnant only about half as frequently as the average, if the women attending birth control clinics can be taken as the average. Finally, they brought to living birth a far smaller proportion of the children conceived than appears usual. Just over half of the group, 287, bore even one living child, and these bore a scant two apiece. Those who bore more than one or two living children had done so before contracting tuberculosis. Losses before and immediately after birth were disproportionately high, averaging thirty-five to every hundred living births. But losses after birth were extremely infrequent. Most of the babies were breast fed and kept on a careful regimen, and nearly all were given medical examination, so that only a third of the expected number died in infancy, and few thereafter. Of the 579 children born alive, 556 were still alive when their mothers reported, fifteen years later. The majority of these women did not claim any relationship between tuberculosis and pregnancy. Only one-third of those pregnant at any time found that the disease began or recurred with a pregnancy or after a delivery or an abortion. But, of all women pregnant before "cure," 44 percent had found their tuberculosis adversely affected. The more advanced the tuberculosis, the more deleterious the effect of pregnancy. The women who took sufficient time before getting pregnant after being "cured" (three years or more), and who obeyed all rules and regulations after leaving Trudeau, fared better than those who did not. Postpartum hemorrhage occurred in a very large proportion, amounting to 44 out of 317 cases, or 13 percent. Menstrual disorders were very common among this group of tuberculous women, being reported by 47 percent. Out of the 579 children born, 556 are alive, and 501 are healthy and well. Fifty-five are below par, and only 9 of these have had tuberculosis in any form, or have been suspected.

TREATMENT OF FRACTURES OF HEAD AND NECK OF RADIUS

J. Albert Key, St. Louis *(Journal A. M. A.,* Jan. 10, 1931), insists that certain fractures of the upper end of the radius should be treated conservatively, others should be treated by immediate operation with either removal or replacement of the head, and others should be treated expectantly and the head removed later if necessary. The

fractures that should be treated by each of these methods are enumerated. In children, the displaced head of the radius can be replaced by open operation and a practically normal elbow and forearm may be expected. After early removal of the head of the radius, a satisfactory but not a normal elbow and forearm may be expected. Traumatic arthritis is the result of function in a disorganized joint, and late removal of the head of the radius after the arthritis has developed will not as a rule cure the arthritis.

PEPTIC AND DUODENAL ULCER IN TABES DORSALIS

Edward Livingston Hunt and James R. Lisa, New York (*Journal A. M. A.*, Jan. 10, 1931), report four cases. In each instance the patient had been under observation, the clinical diagnosis had been agreed on, and the autopsy had been made. The essential points in these cases were: The presence of a nonsyphilitic ulcer in a syphilitic patient; the fact that the terminal stage of the disease was due to the ulcer and not to the tabes; the failure to diagnose the ulcer before death; the fact that the diagnosis was overlooked because of the similarity of the symptoms; the fact that in one case there were bloody stools, and proof from the autopsy that the patient had tabes.

COMPARATIVE BIOLOGIC AND HISTOLOGIC STUDY OF LYMPH GLANDS FROM SYPHILITIC PATIENTS

The inguinal lymph glands from twenty-one syphilitic patients were removed and studied histologically and biologically by Eli Saleeby and Sigmund S. Greenbaum, Philadelphia (*Journal A. M. A.*, Jan. 10, 1931). In five cases they were able to find *Spirochæta pallida* in the sections, while in others only dark stained granules were observed. In the animals, thirteen became positive after the first transplant and three after the second transplant. The organs from nine of the positive rabbits were studied histologically for spirochetes. The tests were positive in all the cases, the lymph glands in five and the heart and aorta in two. Dark stained granules were present in most of the lymph glands, and in the heart and aorta in one. These granules were mainly in the lymphocytes. The results of this study tend to compare the histologic and biologic methods with the clinical and laboratory diagnosis. They suggest the possible occurrence of a granular form of *Spirochæta pallida* or some other species which cannot be definitely identified with our present diagnostic methods and present knowledge of the life cycle of this organism. Also they tend to show that the failure to find the organism in the remote tissues is partly due to the fact that after leaving the original focus of infection the majority of them are broken up into granules, probably by phagocytic cells, before going into the circulation. This is probably accomplished by the lymphocytes, as evidenced by the accumulation of the previously described granules in the lymphocytic cells of the lymph glands.

IN ORDER

Nurse (going off duty): "Is there anything else you wish, sir?"

Patient: "Yes, kiss me good night."

Nurse: "I'll send in an orderly—he does the dirty work."

WISE PRECAUTION

Guest (in a restaurant): "Bring me a Welsh rarebit, a broiled lobster, a quart of beer and a piece of mince pie."

Waiter: "Will you please write out that order and sign it, sir?"

G.: "What for?"

W.: "As a sort of an alibi for the house to show the coroner, sir."—*Clin. Med.*, Feb. 1930.

A country minister was driving a spirited horse through a village when he overtook the local doctor and offered him a lift.

Ten minutes later the horse bolted, upset the carriage, and spilled both men. The doctor rose to his feet and turned angrily towards the clergyman.

"What do you mean by inviting me to ride behind such an animal?" he demanded.

"Well," replied the minister, mildly, "it was lucky that this time there were no bones broken, but I always like to have a doctor with me when I drive that horse."

"She has a very magnetic personality, hasn't she?"

"Yes; everything she wears is charged."

A teacher asked her class to write an essay on London. Later she was surprised to read the following in one attempt:

"The people of London are noted for their stupidity." The young author was asked how he got that idea.

"Please, miss," was the reply, "it says in the text-book the population of London is very dense."

Angry Parent: "My daughter does not want to be tied to an idiot all her life."

Suitor: "Well, why not let me take her off your hands?"

FRIEND OF THE STORK

The doctor of a country village had two children who were acknowledged by the inhabitants as being the prettiest little girls in the district.

While the two children were out walking one day, they happened to pass quite near two small boys; one lived in the village and the other was a visitor.

"I say," said the latter to his friend, "who are those little girls?"

"They are the doctor's children," replied the village boy. "He always keeps the best for himself."—*Montreal Star.*

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ORIGINAL ARTICLES

THE ANO-RECTAL REGION AND ITS RELATION TO DISEASE*

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In a study of the ano-rectal region and the relation it bears to the general health, it is desirable to make brief reference to some of the more salient points of the anatomy and physiology. A knowledge of the anatomy is essential as a preliminary to an accurate examination and proper treatment. When it is estimated that from twelve to fifteen percent of all individuals suffer from some kind of rectal disease, it behooves everyone to obtain all the reliable information possible as to the relation disease in this region bears to the general system. With the increased knowledge and attention being devoted to disease of the ano-rectal region and the bearing it has on health of the individual, it is encouraging to find the proctoscope coming into general use as an aid in making an accurate diagnosis. Many symptoms formerly complained of, and attributed to disease in organs remote from the ano-rectal region, have been found to be intimately connected with the primary trouble located in the rectal region.

The rectum is that dilated portion of the large bowel beginning at the termination of the pelvic colon opposite the body of the third sacral vertebra and ending at the pelvic diaphragm. It is devoid of peritoneal covering, and the mucous membrane is smooth and without folds and haustrations. Projecting from the sides of the rectum are permanent crescent shaped folds of the mucous membrane, the valves of Houston. These valves occupy about one-half of the bowel circumference, and correspond to the deep grooves on the opposite side of the bowel wall. The blood vessels are without valves and are buttonholed through the bowel wall at the recto-sigmoidal junction. They lie just beneath the mucous membrane of the rectum and run in a longitudinal course instead of encircling the bowel as found in other parts of the colon.

The anal canal is the constricted terminal end of the large bowel and extends from the point where it perforates the pelvic diaphragm to the external orifice of the anus. The length of the canal is about one inch and is directed downward and backwards, forming an angle to the rectum from sixty to ninety degrees. This angulation in connection with the normal tone of the sphincter muscles is sufficient for competency when in a state of repose. The upper portion is formed from the entoderm and is covered with columnar epithelium. The lower half is formed from the ectoderm and is covered with pavement epithelium. This muco-cutaneous junction is known as Hilton's white line, and is of considerable diagnostic and surgical importance. This is the dividing line between the systemic and portal circulation and conveniently separates the extrinsic and intrinsic sphincter muscles and their nerve supply. The upper border of the anal canal is thrown into numerous vertical folds, the columns of Morgagni, and between these columns are found small pockets or crypts, forming the serrated border of the recto-anal junction, the pectinate line. Familiarity with the numerous pathological conditions that have their beginning in this region, such as internal hemorrhoids, fissure, fistula or abscess, cryptites, etc., will determine the success in treating rectal diseases and the accuracy in arriving at a proper diagnosis.

The rectum is guarded at both extremities by an increase of the circular muscular fibers which have sphincteric action. Any increase in the sensitiveness or irritability of these muscles may interfere with the normal process of defecation or hinder reperistalsis with the return of the fecal mass into the sigmoid, when the calls of nature have not been obeyed. This condition has been described by Hurst as rectal constipation or dyschesia. This is the type of constipation where the greatest amount of relief is obtained through the use of tepid normal salt enemas. The repeated use of cathartics in these cases aggravates the trouble and increases the spasticity of the muscles of evacuation. To overcome the inhibition of the para-sympathetic system, small doses of some anti-spesmotic to lessen the irritability and relieve the spasm will give marked results in many of these cases.

A similar thing often prevails when there is present in or near the anal outlet a painful condition which produces an obstacle to efficient defe-

*Presented before the Section on Medicine of the Indiana State Medical Association at the Fort Wayne session, September 25, 1930.

cation, such as fissure, hemorrhoids, fistula, etc. Hypertonicity of the unstriped muscular fibers that guard the anal opening or spasms of the sphincter through some irritability of the pelvic para-sympathetic nervous system in highly nervous individuals is the cause of fecal retention and spastic constipation. Spastic constipation is generally conceded at the present time to be the type of constipation most frequently encountered.

In searching into the cause and prevention of disease the field of investigation has extended gradually until it now includes a systematic examination of the ano-rectal region. Medical men are realizing the increased importance of the ano-rectal region, as a source of focal infection, and do not consider a diagnostic survey complete until a digital and ocular examination of this region has been made. The ano-rectal region, with its wide distribution of lymphatics and rich blood supply, is capable of implanting infection along the circulatory channels while coursing through the abdominal cavity. In recto-sigmoidal carcinoma metastasis to the liver marks the dividing line of operability. With this relation definitely established, why isn't it reasonable to have secondary infection with streptococci, staphylocci, or colon bacillus implanted along the course of the portal circulatory channels, the same as mediastinal involvement following sinus infections?

It is a well-established fact that many points of focal infection are found in the upper respiratory and digestive tracts. The teeth, tonsils and sinuses are the principal offending organs, and may justly be considered as the portal of the majority of diseases attributed to have originated from some focal infection. Competent medical and surgical care of these cases are often attended with little or no relief. Further research including a colo-anal examination will be rewarded frequently with the additional information which, when properly cared for, will give the desired relief.

Alvarez, in his second edition of "The Mechanics of the Digestive Tract" alludes to the sensitiveness of rectal pressure. He finds that distensions of the rectum with any absorbable material can produce vomiting, nausea, loss of appetite, depression, restlessness, and mental laziness; also the frequent rise in blood pressure of several mm. He further says that these sensations produced by distensions, those that are commonly ascribed to the presence of toxin reabsorbed from the colon, such as headaches, malaise and a general feeling of depression, and symptoms which are often attributed to auto-intoxication, are relieved within a very short time following defecation. One often experiences a feeling of relief from this pressure sensation, even before the bowel is emptied completely. These sensations are not due to the absorption of toxins from the colon, for it is a well-known fact that a system laden with toxins requires considerable time before the excretory organs can eliminate these poisons from the system. He also refers to a reversal of the rectal gradient where the normal tone of the rectum is higher than the colon immediately above, resulting in a repristalsis of the rectal contents. When this loss of irritability of the rectum is brought about through the neglect of Nature's calls, the sensitiveness of the rectal mucous membrane ceases to respond to the presence of fecal matter and normal defecation, but is sensitive to the pressure in the rectal ampulla, with an exaggerated sensation of fullness, headache, drowsiness, and the chain of symptoms commonly known as auto-intoxication.

Hertz says there is no doubt that some of the symptoms attributed to constipation are purely reflex in origin and others are simply due to the mechanical pressure exerted on various structures by fecal accumulations. He lays little stress on auto-intoxication as resulting from constipation, but on the contrary believes that in many cases of constipation bacterial evidence is still wanting to show that the products of ordinary bacterial decomposition in the intestines can give rise to poisonous symptoms on absorption.

If defecation is postponed when this reversal of the rectal gradient is not sufficient to relieve the pressure in the rectum, or the tightening of the sphincters through an irritability of the sympathetic nervous system or some irritating lesions about the anus, constipation is found, and this is actually the beginning of constipation in a great many instances.

Bleeding from the rectum is frequently the first symptom to attract attention, and is so constant where internal piles are present that the term "bleeding" and internal piles are practically synonymous. It is the exception to find internal hemorrhoids existing for any length of time without the loss of blood occasionally. The daily loss of blood is often attended with the symptoms of extreme weakness and pallor and may bring on a state of profound anæmia with a greatly reduced hemoglobin and red blood count. Blood coming from hemorrhoids escapes subsequent to defecation, is bright red in color and is not mixed with the feces.

From the standpoint of diagnosis it obviously becomes necessary to distinguish between bleeding from the pile-bearing surface and from some point higher up in the alimentary tract. The farther distant the bleeding originates from the pile-bearing area, the more distinctive is the alteration in the blood by the action of the different digestive ferments and mixing with the intestinal contents. Blood intermixed with the feces without increased frequency of evacuation ordinarily would indicate some bleeding point, such as ulcer of the stomach, small intestines, etc. Frequency and looseness of bowel passage where there is evidence of blood would be indicative of an ulcerative condition of the colon, especially would this be so where a fetid odor is present. A proctoscopic examination with a good view of the rectum and sigmoid is imperative in every case. The early diagnosis of rectal

cancer is equally as essential as in other regions of the body. Rectal carcinoma, early diagnosed and properly treated, should receive more favorable statistical reports than we find in our current medical literature.

It is becoming generally recognized that symptoms which usually form the clinical picture of gastric disturbances are often associated with distant lesions and chronic infections of the gall bladder and appendix. It is also being appreciated that the discomfort resembling disease of the stomach and duodenum such as eructation, vomiting and pain are associated with bowel symptoms, such as a feeling of fullness in the lower abdomen, drowsiness, and a slight headache. This distress is almost invariably associated with a chronic spasticity of the colon and in most cases this increase of nervous tone will be manifest in an increase of nervous irritability of the sphincter muscles. A recurring epigastric pain is often associated with spasticity of the colon. The usual discomfort, and because of its character and relation to the taking of food, a striking resemblance to gastric or duodenal ulcer can only be differentiated through a careful history and through examination of the lower bowel.

In this discussion of some of the complaints and disturbing factors which affect the general health that originate in the ano-rectal region, hemorrhoids is the one disease that stands out most prominently. Hemorrhoids are very ancient, and one of the maladies first mentioned in the history of medicine. In Egypt there were "pile doctors" before Joseph was sold into bondage. The derivation of the name signifies bleeding. They are located at the outlet of the alimentary canal and in close proximity to the sphincter muscles. They may be classified into two general groups. The internal hemorrhoids, located internal to the internal sphincter muscle, are covered with mucous membrane and receive the blood supply from the portal circulation. The external hemorrhoids are located external to the sphincter muscles, are covered with skin and derive their blood supply through the systemic circulation. The pathology of the two types is very similar; they differ only in the anatomical situation which determines largely the relative clinical symptoms produced, and the method of treatment given for relief.

The leading symptoms of internal hemorrhoids are: (1) bleeding, (2) prolapse, (3) itching, (4) reflex manifestation, (5) mental depression. Pain is not a prominent symptom, and in fact pain is not complained of except as it occurs in connection with some complication or from an intercurrent inflammation of some kind. The external hemorrhoids are likewise painless unless thrombosed or inflamed. The redundant skin tabs present an annoyance from their sanitary inconvenience, but seldom require attention. The external thrombolic hemorrhoid is the type that is usually responsible for the "acute attack of piles." They come on suddenly and are attended with considerable amount of pain and discomfort. Internal hemorrhoids of the non-inflammatory type are painless as a rule, and are not discernible through the touch of the examining finger. A painless non-sclerosed internal hemorrhoid is diagnosed by ocular observation only when brought into view by being prolapsed or through the anascope.

In this discussion of some of the ano-rectal diseases which contribute materially in lessening the efficiency of an individual, and which add to his discomfort and render him unfit to maintain a standard of usefulness, only a few of the more distinctive points have received attention. In the mentioning of rectal trouble, hemorrhoids and their treatment stand out most prominently. To care for and satisfactorily treat hemorrhoids establishes a standard of efficiency for the treatment of rectal diseases. In the time allotted, the treatment of hemorrhoids will be considered applicable to the average patient presenting himself at the office for relief.

In the treatment of hemorrhoids, reference will be made only in connection with the treatment of internal hemorrhoids. The two methods employed are operative and palliative, or ambulatory. It is necessary to distinguish clearly between a cure of hemorrhoids and the relief of symptoms. The patient's economical, social and physical condition must be considered when advising treatment. It also must be recognized that many patients have a horror of a hospital and detest an anesthetic and its unpleasant after effects; besides, it is often difficult to spare sufficient time to undergo an operation, except at a great sacrifice.

Operative treatment always is preferred and when performed under the proper surroundings and efficiently done, gives a permanent cure and is attended with little or no distress. It is the exception to have a patient complain of much pain following an operation or during the primary bowel evacuation.

A great number of patients, through necessity or by choice, prefer the ambulatory treatment, and are satisfied with the relief afforded by the injection method or by electrolysis. These patients are rendered symptomless for different periods of time, and many are relieved permanently and remain free from further trouble. The results are practically the same when some form of escarotic has been used as an injection, or the substitution of electro-coagulation. I prefer the use of a five-percent solution of quinine urea hydrochlorid, which causes a sclerosing of the pile tumor and is practically free from any serious complication.

In properly selected cases of internal hemorrhoids where a definite technic is observed, the ambulatory treatment proves very satisfactory in a large number of cases. The treatment should be carried out by someone who has observed a series of cases and is familiar with the progress which should be obtained. It is a mistaken idea that the ambulatory treatment can be administered successfully with one or two office visits,

but on the contrary the treatment and observation should extend over a period of three to eight weeks before the patient is discharged.

Discussion

Stanley McClure Casey, M.D. (Huntington): I am sure many of us have found from experience that it is wise to withhold a diagnostic opinion in any case until after rectal examination has been made. When we realize that perhaps sixty percent of the malignancies of the gastro-intestinal tract occur in the rectum and lower bowel, when we realize that many symptoms referable to the upper gastro-intestinal tract clear up immediately when painful anal fissures or painful hemorrhoids are treated, we find the reason for this. By far the greater number of conditions in the ano-rectal region can be recognized by the examining finger. When there is any doubt, and in all cases of pain referable to this region, in all cases with symptoms referable to the gastro-intestinal tract, a proctoscopic examination should be made.

I am sure Doctor Wheeler's idea of explaining the symptoms usually referable to so-called auto-intoxication as due to rectal pressure will be received favorably by most of us. How much importance we should ascribe to the colon and rectal region as a source of focal infection, as we usually recognize it, is not clear to most of us. We have probably had a tendency to minimize its importance recently. Doctor Wheeler's idea and a recent paper by Doctor Fishbaugh, of Los Angeles, in which he reports several cases of chronic arthritis being benefited by daily irrigations of the colon, make us feel that we should recognize the colon more often as a possible source of focal infection.

Regarding ambulatory treatment of hemorrhoids, this probably has not found favor with most of us because the patient commonly has quite a good deal of distress, and the treatment must be carried out over several weeks if it is to be successful. Even then there are many recurrences, so the ordinary surgical removal of hemorrhoids is still the most popular treatment.

I. E. Perry, M.D. (North Manchester): Of all the symptoms complained of by patients who come to our offices, I expect one of the things that attracts attention more than any other is backache, a sacro-iliac arthritis. It has been my experience that ninety percent of these cases originate in the rectum. An operation for the removal of hemorrhoids has cured a number of these cases for me, and my own case especially.

E. S. Parmenter, M.D. (Detroit, Michigan): Can Doctor Wheeler give us the percentage of the number of cases that, if placed on proper regimen with sedatives for the colon and so forth, will require the treatment he prescribes for hemorrhoids?

Doctor Wheeler (closing): The antispasmodic will relieve the spasm of the colon, and the spasm of the fissure, but will not do the hemorrhoids or the cryptitis any good. If there is an anal fissure, a cryptitis or a fistula, the patient must be operated upon. If we have a nervous individual with a spasm of the colon, the antispasmodic and the diet will relieve the symptoms.

THE THROAT AND THE HEMATOPOIETIC SYSTEM*

John J. Shea, M.D.
Memphis, Tennessee

The infections that gain their entrance into the system through the throat are met by different hemic responses, depending upon whether the toxin stimulates or paralyzes the hematopoietic system.

The older physiologist considered the blood as a special form of connective tissue having a fluid matrix. The modern conception is that the blood is a mixed secretion whose formed elements are the result of parent cells living outside the blood stream. These hematopoietic tissues differ in the embryo and the adult. In the former as a result of the activities of the blood islets in the yolk sac, the primitive liver, and the reticulo-endothelial system, the fœtal blood is formed. The capillaries of the formative bone marrow, and the lymphoid follicles of the spleen, and other lymphoid structures next add to the natal blood. The process changes gradually until in adult life there exist groups of parent cells outside the blood stream with four major hemic units in the blood. From parent myeloblasts in the red bone marrow come the granular cells, which are the polymorphonuclear leucocytes, and monocytes; from the lymphoblasts are derived the lymphocytes, and from the normoblasts the red blood cells.

The bone marrow houses an emergency supply of polymorphonuclear leucocytes, and can deliver them into circulation when needed. If the surplus is consumed, and the newly formed ones are not sufficient for the demand, then immature forms will be found in the circulation. The leucocyte lives three to five days in the blood stream.

The anginas are capable of producing four types of changes in the blood:

(a) Polymorphonuclear leucocytosis as seen in follicular tonsillitis and the septic throat.

(b) Mononuclear leucocytosis as occurs in infectious mononucleosis.

(c) Leucopenia with a decrease of granulocytes —agranulocytic angina and pseudo-agranulocytic angina.

(d) Leucocytosis with a relative hyogranulocytosis, as seen in the patients suffering from a generalized Vincent's infection, acute lymphatic leukenia, and acute lymph adenosis.

Significance of Leucocytosis. Arneth elaborated a classification of the neutrofilic leucocytes by dividing them according to their stage of development into five classes. In the left hand group he

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at the Indianapolis session, December, 1930.

placed the myelocytes and metamyelocytes, while in the right hand group he placed the lobulated neutrophiles of two to five lobes, considering that age was directly proportional to the degree of the lobulation of the cell. If the cells of the left hand are increased proportionally above the normal at the expense of the right hand group, Arneth termed it a shift to the left, and the extent of this shift signified the degree of infection. Victor Schilling simplified the count by dividing the neutrophiles into myelocytes, juvenile, stab (band-shaped nucleus) and segmented. He disregarded the number of lobes in the nucleus.

SCHILLING'S HEMOGRAM

	Normal	Shift to the Left	To Right	Normal
Basophiles	1.0	0.0	1.0	1.0
Eosinophiles	3.0	0.5	2.0	3.0
Neutrophiles:				
Myelocytes	0.0	1.0	0.5	0.0
Juvenile	0.0	4.0	2.0	0.0
Stab	4.0	15.0	8.0	4.0
Segmented	63.0	59.5	61.5	63.0
Lymphocytes	23.0	18.0	20.0	23.0
Monocytes	6.0	2.0	5.0	6.0

The suppurative conditions of the throat will be studied in the future by the use of these hemograms and a shift to the left is of more importance than an increase in the number of leucocytes. Likewise a shift to the right is evidence that the resistance is improving and that the infection is no longer virulent.

Agranulocytic Angina. Today we are seeing more of these agranulocytic anginas either because the disease is more frequent, or because the laryngologist is more alert. There are two varieties, one which ends fatally, and is more frequently seen in middle aged women, and another, which is only a complex. The etiology of the disease is not known definitely. Various observers have isolated the following from lesions of the throat in these cases:

(a) Bacillus pyocyaneus.
(b) Streptococci—hæmolytic.
Streptococci—non-hæmolytic.
(c) Staphylococcus.
(d) Vincent's bacteria.

The toxin which causes the malady is capable of paralyzing the hematopoietic system, especially the bone marrow where the myeloblasts are producing granular units. This same blood picture can be produced by the intravenous administration of trypan blue dye. The dye in being taken up by the reticulo-endothelial system blocks its function. The granulocytes are absolutely and relatively reduced by the blocking of the reticulo-endothelial system of the bone marrow.

The action of the toxin is the same as that of massive doses of roentgenrays on the long bones. The initial sore throat is the usual portal of entrance of the infection, but later other mucous membranes, as the intestines, and vagina present lesions. The throat picture depends on the amount, and the location of the lymphoid tissue that it contains, and if the patient has retained her tonsils they will be found to be covered early with an exudate. Thereafter the progress of the disease is of a general infection which ends fatally. The true case I am reporting was clinically diphtheria.

Strangely, the glandular system does not present any uniform enlargements, as only the glands immediately adjacent to a lesion enlarge. The logical treatment of these cases is to supply the deficiency, which is blood, and to stimulate the hematopoietic tissues to renewed activity.

Lymphocytes are relatively increased though absolutely decreased. The red blood cells, platelets, and hemoglobin remain within normal limits until the terminal stage, when they take on the picture of a secondary anemia. The bleeding and coagulation time remains normal, and the blood of these patients type, and match readily when seeking a donor for transfusion. The blood cultures reported have not been consistent as to any organism.

I wish to report one true case, and two cases, one from neoarsphenamine, and the other of an unknown origin whose blood pictures were those of an agranulocytic angina. The full reports may be found in a previous article by the author: "The Blood in the Various Anginas"—*Archives of Otolaryngology,* September, 1930, Vol. 12, pp. 366-375.

Case 1—Mrs. M., fifty-one, white, housewife, was seen in consultation with Dr. Henry G. Rudner at the Baptist Hospital May 6, 1929.

Chief Complaints—Weakness, sore throat and fever.

Family History—One sister died with a blood dyscrasia (myelogenous leukæmia). One uncle died of carcinoma of the throat, and one of her grandmothers died of a malignancy of the eye.

Present Illness—Three weeks ago she had fever with no localizing symptoms. One week later she developed a severe sore throat, and the family doctor gave diphtheria antitoxin, as both tonsils were covered with a pseudo-membrane. For one week her throat was sore and painful and the fever rose each evening as high as 104 degrees. A few days previous to admission she had diarrhea and pain in her knees.

General Examination—General appearance of an acutely sick woman with an icteroid tinge.

Face—Herpes on nose and lips.

Mouth—No teeth present, and the alveolar processes were normal. The tongue was coated heavily with a white fur. The pharynx was infected. There was a necrotic ulcer on the anterior pillar of the left tonsil, and the posterior pillar of the same tonsil was displaced by a swelling from behind, which probably was a gland. The tonsils were clean, but had a cadaveric appearance.

Neck—The anterior glands were palpable, and tender.

Chest—Numerous bronchial rales. The heart was normal.

Abdomen—Generalized tenderness, but liver and spleen were not palpable.

Genitalia—Showed a marked irritation with an erosion on the left vulva.

Extremities—Knees were tender but not enlarged, with normal mobility.

Rectum—A small erosion present.

Blood—Red blood count, 3,240,000; white blood count, 1200; polys, 10 percent, large lymphocytes, 10 percent, and small lymphocytes, 80 percent.

Urine—Negative.

Smears from the throat lesion were rich with the bacteria of Vincent's. A culture made from the same region was negative for diphtheria bacilli.

Progress—The mouth lesions became more lymphocytic in character, and similar lesions appeared in the rectum. A severe diarrhea ensued from similar intestinal lesions, and the patient gradually grew weaker and died.

The treatment consisted of three whole blood transfusions averaging 200 cc. Deep x-ray therapy was applied to her tonsils, glands of the neck, pelvic girdle, and the long bones. The blood count was done daily, and descended as low as 500 leucocytes with an average of ten percent of the granular cells.

The autopsy revealed that the bone marrow was aplastic, and consisted mostly of fat with a few small areas of marrow cells, consisting chiefly of lymphocytes, and other mononuclear cells. The tonsils showed microscopically an atrophy of the lymphoid structure.

press the hematopoietic system, and present a symptom complex resembling acute agranulocytic angina.

Case 2—Mrs. D. P., aged twenty-six, was seen in consultation with an acute throat, fever and a rash previously diagnosed "measles."

History—During a physical examination her blood was found to react four-plus to the Wassermann test, and arrangements were made for a course of neo-arsphenamine. Three days after the second dose she developed a fever of 104 degrees with a maculo rash.

Upon admission to the hospital three days later she still had a slight rash, and her blood count was reported as follows:

R. B. C. 3,300,000, Hg. 60%, W. B. C. 4,400, Polys N. 2.5%, Polys E. 2%, S. L. 81.5%, L. M. 14%. Her treatment consisted of one blood transfusion of 300 c.c. of whole blood, intravenous administration of 7½ grains of sodium thio-sulphate every twelve hours for three days, and a supportive diet rich in vitamins.

A chart of her blood shows the gradual increase of the granular elements, and the blood count on discharge was W. B. C. 9,100, Polys 75%, S. L. 25%, L. M. 1%. The course of the blood is shown in chart No. 1.

A Case of Agranulocytic Angina Complex of Unknown Cause. Case No. 3—W. S., aged sixty, was admitted to the hospital convalescing from

CHART NO. 1

Date, March, 1930	Hemoglobin, Per-cent	Erythrocytes, per C. Mm.	Leukocytes per C. Mm.	Polymorphonuclear Neutrophils, Per-cent	Eosinophils, Per-cent	Basophils, Per-cent	Small Lymphocytes, Per-cent	Large Lymphocytes, Per-cent	Large Mononuclears, Per-cent	Transitionals, Per-cent
11	60	3,300,000	4,900	2.5	2	....	81.5	....	14	....
12	....	4,100,000	4.100	2	1	....	56	3	36	2
13	....	.....	4,300	4	....	....	64	2	30	....
14	....	4,100,000	4,650	8	....	....	68	1	23	....
15	....	.....	4,550	13	....	....	61	1	24	1
16	....	.....	4,550	22	....	1	62	....	15	....
17	....	.....	5,000	36	....	....	64	....	10	....
18	....	.....	5,200	37	....	....	58	....	5	....
19	....	4,900,000	5,100	49	....	....	42	....	9	....
20	....	.....	6,500	52	....	....	42	....	6	....
21	....	.....	7,250	60	....	....	36	....	4	....
22	....	.....	7,500	62	....	....	32	....	6	....
23	....	.....	9,100	74	....	....	25	....	1	....

CHART NO. 2

Date, March, 1930	Hemoglobin, Percent	Erythrocytes, per C. Mm.	Leukocytes, per C. Mm.	Polymorphonuclear Neutrophils, Percent	Small Lymphocytes, Percent	Large Lymphocytes, Percent	Large Monocytes, Percent	Lymphoblasts, Percent
22	80	4,000,000	1,800	1	97	....	2	....
23	....	.....	2,150	3	96	....	1	....
24	....	.....	1,550	2	90	....	4.5	3.5
25	....	3,700,000	1,550	3	82	8	5	2
Transfusion:								
27	....	.....	3,950	28	60	3	8	1
28	....	4,600,000	4,000	41	52	2	5	....
29	....	.....	4,300	48	40	5	7	....
30	....	.....	6,300	58	33	....	9	....
31	....	4,500,000	6,900	58	40	....	2	....
April 1	....	.....	11,100	72	24	....	4	....
April 2	85	4,500,000	10,500	73	20	....	7	....

A Case of Arsenical Poisoning with an Agranulocytic Blood Picture. The intravenous administration of arsenical compounds may at times de-

pneumonia. He had a bilateral acute maxillary sinusitis which improved under simple irrigation, and was ready for discharge when he developed

an acute angina with a rising temperature. A small ulcer was visible on the left tonsil, from which many fusiform bacilli and spirochetes of Vincent were obtained. The blood picture was a revelation. W. B. C. 1,800, polys N. 1 percent, S. L. 97 percent, L. M. 2 percent. The granular elements were reduced to 3 percent, showing the hematopoietic tissue whose function is their production had been paralyzed by the excess of toxins and the Vincent smears were of no special significance.

Chart No. 2 demonstrates the course of blood findings.

Date, March, 1930	Hemoglobin, Percent	Erythrocytes, per C. Mm.	Leukocytes, per C. Mm.	Polymorphonuclear Neutrophils, Percent	Small Lymphocytes, Percent	Large Lymphocytes, Percent
11	46	2,700,000	40,200	3	44	53
14	38	2,100,000	37,800	3	49	48

The toxin which paralyzed the hematopoietic system was not that of the Vincent's organisms as the next case is typical of the fatal type of this disease.

Vincent's Angina. Case No. 4—E. L., aged twenty-four, was admitted with a severe angina following a prophylactic dental treatment. His gums were ulcerated and swollen, and the glands of the neck enlarged. Hemorrhages from the stomach and intestines, the result of a severe toxic condition, caused his death five days after admission. Smears from his gums were positive for Vincent's, and every visible lymphoid tissue of the throat ulcerated.

In these Vincent's cases the predominating cell is a mature small lymphocyte, and in the less rapid cases their percentage will be over ninety.

The finding of the bacteria of Vincent's in lesions does not conclude that all the symptoms are the result of their growth. These organisms are found commonly in any lesion of the mouth when the conditions of partial anærobia exist.

Vincent's is usually a local pathological entity, but occasionally it may excite a systemic response, and if this response is hæmic, there will result a lymphocytic leucosis. The number of leucocytes may reach 30,000-40,000, and the percentage of lymphocytes over ninety. These patients usually die unless carefully treated. These cases differ from the acute lymph adenosis, and acute lymphatic leukemia.

Infectious Mononucleosis. The monocytes are normally on the increase during the second stage of leucocytic response to infection, and in chronic malaria the percentage of monocytes is from six to ten.

Pfeiffer in 1889 described an acute febrile disease characterized by an angina with enlarged glands, and having a blood picture in which the monocytes, and lymphoid leucocytes were increased. Many names have been assigned this condition:

(a) Glandular fever.
(b) Infectious mononucleosis.
(c) Acute benign lymphoblastosis.
(d) Acute lymph—adenosis.

The disease is the result of some toxin stimulating the hæmatopoietic system, and the resulting new cell produced being a mononuclear leucocyte.

Mononucleosis is a febrile condition starting with an angina, and having the usual headaches and malaise, but whose blood study shows a relative and absolute increase of monocytes is the true, infectious mononucleosis. It occurs most frequently in the young adult, and females are more susceptible than males. The etiology is non-specific, and the course is benign. The oxydase stain will differentiate the monocytes.

The glands of the neck are enlarged, but not strikingly so, and the spleen palpable. The first study of the blood with Wright stain will show merely a relative and absolute increase of the mononuclear leucocytes, but the oxydase process will bring out the granules in some of the cells, thereby separating the lymphocytes, and the large mononuclears. The symptoms subside gradually, but the blood picture remains mononuclear for months. The throat lesions in these cases vary from a slight ulceration to extensive inflammations, and the bacterial study of direct smears and cultures gives no help. The presence of Vincent's organism in the direct smear is common if there is an anærobic recess as under a membrane covering a slough. The total white blood cell count does not increase to an alarming degree, and remains under twenty thousand.

Last year I saw in consultation a young married lady with a persistent angina whose blood picture was: R. B. C. 3,800,000, Hg. 75%, W. B. C. 12,100, Polys N. 32, 5%, Polys E. O. 5%, S. L. 58%, L. M. 5.5% and six months later was: R. B. C. 4,200,000, Hg. 75%, W. B. C. 5,800, Polys N. 50%, Polys E. 1%, S. L. 45%, L. M. 4%.

When she was first seen a smear from her tonsil lesion was rich in the organisms of Vincent's, and we feared she was to be one of the lymphoid leucocytosis cases, but a study of her blood with an oxydase stain showed a 7.5 percent of the large mononuclear cells, and we then knew she was of the benign class, acute infectious mononucleosis.

The laryngologist must keep in mind the possibility that the lesions encountered in the mouth and throat may be the result of either acute lymphatic leukemia or acute lymph adenosis.

Mr. G. W. H. was seen because of a mouth lesion found to be rich in the bacteria of Vincent's. He was acutely ill and attributed his mouth to an

infection following a tooth extraction. Many lesions subsequently developed in the mouth and rectum, and all were positive for Vincent bacteria. His death was typical of lymphatic leukemia ending.

	3/15/25	3/17/25	3/19/25	3/21/25
RBC		2.6 M M		
Hg		50% S		
WBC	106 M	114 M	109.M	
Poly N	5.0	0.0	0.0	
Poly B	1.5	4.0	5.0	
Lymph	93.0	95.5	94.5	
L. M.	0.5	0.5	0.5	

Wassermann—Negative.
Blood Culture—Negative.
Smear positive for Vincent's.

LYMPHOBLASTOSIS

Acute Lymph Adenosis. Mrs. T. S. W., aged twenty-three, formerly our operating room nurse, was admitted to the hospital with an acute glandular enlargement, and a blood count of W.B.C. 399,000, S.L. 16%, L.L. 6%, Polys 78%. One month previously she had undergone a minor gynecological operation at which time she was thoroughly examined and found to be in average health. Her progress was rapid, and she died one month after admission.

Date	12/22/28	26	30	1/14/29
R. B. C.				1,600,000
Hg.				25%
WB C.	399,000	202,000	352,000	205,000
S. L.	16%	42%	50%	88%
L. L.	6%	29%	30%	5%
Polys N.	78%	27%	15%	4%
L. blasts		2%	5%	3%

Are these small cells stem cells, or mature small lymphocytes? In this case the granular cells responded in the beginning, and the first differential of 78 percent is in marked contrast with the 3 percent of the last count. A thorough study of this young lady was non-productive of any knowledge of the etiology of her disease. The mouth was watched carefully for Vincent's infection but remained clean though very painful during the last week of her life. The terminal mouth and throat lesions were due to a hyperplasia of the lymphoid tissue in the mucous membrane. The tongue became dry and coated with old blood, and she complained of the tongue burning similar to that suffered by the pernicious anemia patient. The glands of the neck remained the same size and consistency throughout the course of the disease.

Conclusions:

(1) The toxins of the various anginas may stimulate or paralyze the hematopoietic system.

(2) A closer study should be done of the blood of these angina patients.

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THE THIRD TRIMESTER OF PREGNANCY*

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It is my objective in this discussion to clarify somewhat the subjects of toxæmia, cardiac disease and anæmia complicating the latter months of pregnancy.

Most of us have remained passive in our obstetrical work even in the face of statistics which show that the United States has a higher mortality resulting from pregnancy and childbirth than any other nation on earth. Philosophizing and theorizing get us nowhere in finding a remedy. Arduous study of each pathological case and tabulating the metabolic and chemical findings, symptoms and histories of large and small series of cases will help. Acknowledgment of lack of information (I was tempted to use the uglier word ignorance) is a good place from which to start.

From Baltimore, Rochester, Minnesota, Pittsburgh, New York and Boston has come some of the best recent work done in attempting to solve the problems arising in the third trimester of pregnancy.

Williams and his associates, especially Stander and Plass, have carried on investigations for the past ten years and so far have developed methods of differentiating chemically between the various types of third trimester toxæmias. They have not, nor has any other investigator, discovered the cause. It is of considerable help, however, to have a clear understanding of the various clinical types of toxæmia.

Systematic "follow-up" examinations of women one year and more after their illness and delivery has been done. It was found that one year after an *eclamptic attack* practically all of the women who recovered were normal as regarded blood pressure and kidney disease. Those cases of *chronic nephritis* or nephritic toxæmia uniformly showed the presence of their disease on the return examinations. They were surprised to find, however, that sixty percent of those cases classified as pre-eclamptic toxæmia presented evidence of chronic nephritis on their return for examination. They had considered the pre-eclampsia cases as forerunners of eclampsia and had held the view that they were preventing more serious trouble by treating them, and still on the return of the presumably milder cases they were worse off as to kidney disease and its concomitants than those who had actually passed through an eclamptic attack. It rather forced the view that most of the pre-eclamptic cases were in reality cases of chronic nephritis of a milder form than those others so classified.

They centered their attention, therefore, upon the pre-eclamptic toxæmia cases and after clinical and chemical study of 120 toxæmic patients, they listed them as either (1) eclampsia, (2) pre-eclampsia, (3) chronic nephritis, (4) eclampsia superimposed upon chronic nephritis and (5) low reserve kidney. Other recent investigators have followed practically the same classification. The liver is quite as important as the kidney in the cases showing metabolic changes and, as I will bring out later, the capillaries of the body suffer most severely from the toxæmia. Eclampsia at

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autopsy is characterized in the liver by necroses beginning in the periportal spaces and encroaching on the periphery of the lobules. Dye functional tests show marked retention in the liver. In connection with eclampsia, it must be kept in mind that when recovery occurs the return to normal is very prompt and the disease is unlikely to recur in subsequent pregnancies. Hepatic power of recovery is quite evidently greater than renal (sixty-five and seventy-five percent dog's liver excised and prompt regeneration). Recovery from chronic nephritis is very slow, if at all, and each succeeding pregnancy is characterized by earlier manifestations of kidney damage.

At Johns Hopkins, then, they transferred the majority of cases previously designated as pre-eclampsia to the category of "low reserve kidney." They limit the pre-eclampsia term to that group of cases in which the patient is actually ill, presents a very high blood pressure and albuminuria, suffers from amaurosis and epigastric pain, presents a blood chemistry picture identical with eclampsia and appears on the verge of convulsions whose appearance can be prevented only by the promptest possible termination of pregnancy. Essentially, pre-eclampsia by this token is identical with eclampsia without the convulsions and coma (five percent of all toxæmias). It is acute nephritis and acute hepatitis along with the blood capillary manifestations stressed by Mussey and Kieth.

The "low reserve kidney" (the largest group) is congenitally deficient or it has suffered a reduction in the number of functioning glomeruli just short of the production of a chronic nephritis. Such a kidney takes care of the ordinary demands of life but breaks under the strain of the added demands of the latter months of pregnancy. It does not always exhibit its deficiency in subsequent pregnancies and if it does it is usually no more severe than in the original break. In patients with "low reserve kidneys" the blood pressure rarely exceeds 150/90, the albumen varies between a trace and two grams per liter. The patient may show œdema, headache and some malaise but improves with rest in bed and a restricted diet. Following delivery there is prompt return to normal. There is no change in the chemical constituents of the blood and the phenolsulphonphthalein output is normal.

The remaining category, "eclampsia superimposed on chronic nephritis," implying also some degree of hypertension, comprises a rather small group of patients who are much more sick than those without the pre-existing nephritis and hypertension. They present an unusually high blood pressure and an excessive degree of albuminuria. Chemical examination shows marked retention of non-protein nitrogen and after recovery from the acute symptoms evidence of renal insufficiency persists. One may be reasonably sure that if, after an eclamptic attack, the blood pressure remains permanently elevated and a trace of albumin remains in the urine, the condition has been eclampsia superimposed on chronic nephritis and not a chronic nephritis originating from the eclampsia.

Differential diagnosis between the various types of toxæmia is not easy, but in general the following clinical points are noted: Pre-eclampsia may be recognized by the strikingly acute manifestations previously mentioned. Between the low reserve kidney and chronic nephritis, the previous history must be taken into account while the demonstration of nitrogenous retention and the existence of albuminuric retinitis clearly point to chronic nephritis. In the absence of these two tale-telling symptoms, one may hold a better outlook with the diagnosis of low reserve kidney. Between eclampsia and eclampsia superimposed upon chronic nephritis, one must also depend upon an examination of the eye grounds and upon the determination of nitrogenous retention in the blood.

The most important features in examination of the urine are the twenty-four hour amount, the number of grams of albumin per liter and the presence or absence of tube casts. Total nitrogen, percentage of urea and ammonia nitrogen to the total nitrogen and the chloride content are of no significance.

In tabulating the chemical analysis of the blood, and comparing the non-pregnant with the pregnant woman, there is a slight diminution in the amount of non-protein nitrogen and a slight decrease in the carbon dioxide combining power, indicating moderate acidosis in the pregnant woman.

No figures are given for the low reserve kidney; it compares favorably with the normal kidney.

Radical changes are seen in the toxæmia of chronic nephritis—chiefly marked retention of non-protein nitrogen, accompanied by a considerable rise in uric and lactic acid. In the condition of eclampsia, there are radical changes in five items and none in two: (1) marked increase in uric acid content accompanied by a very *striking* increase in the amount of sugar and lactic acid and a lesser change in inorganic phosphorus. At the same time, the CO_2 combining power is reduced sufficiently to menace life from acidosis.

Particularly also must be noted the fact that in eclampsia uncomplicated by nephritis, there is no nitrogenous retention. The figures have "gone wild" and indicate the existence of a profound disturbance of metabolism.

The supposition is that "a chemical substance" is responsible for the phenomena exhibited by eclampsia. This chemical substance leads to changes in the capillaries. (Increased permeability œdema.) Mussey and Kieth frankly say that "toxæmia of the third trimester of pregnancy is a widespread vascular disease affecting the smaller vessels throughout the body." Characteristic changes are found in the nail-fold capillaries (studied by Hinselmann) and in the vessels of the eye grounds. Necropsy reveals pathologic changes in the smaller vessels of the liver, kidneys,

brain and other organs with petechial hemorrhages and necrosis in areas supplied by these capillaries. Volhard believed that the circulatory disturbance in the glomeruli of the kidneys is functional—an angio-spastic anæmia; that the disease cures itself following restoration of circulation to the glomeruli, sometimes without leaving a trace in the vessels, depending on the duration of the spastic condition and the resultant anæmia. Long duration of the anæmia produces severe organic changes in the vessels. Hinselmann, in the study of nail-fold capillaries, demonstrated a distinct spasm in segments of the capillary wall with resulting dilation of other portions of the vessel. An intermittent spasm caused complete stagnation with vessel occlusion about two-thirds of the time. Similar changes are found in the smaller vessels of the ocular fundi prior to the appearance of exudates or hemorrhages. Starling's theory that the rise in blood pressure is due to anæmia of the vasomotor centers at the base of the brain—resulting from œdema of the surrounding tissues—also points to capillary disease. In the kidneys both capillary disease in the glomeruli and degenative changes in the tubules are found—with varying predominence of one or the other.

Volhard and Fahr's classification of nephritis in pregnancy modified by Mussey and Kieth include acute glomerulonephritis and acute nephrosis under the heading of pre-eclamptic toxæmia. Acute glomerulonephritis is characterized by hypertension, œdema (scanty urinary secretion), oliguria with albuminuria, usually accompanied by casts and erythrocytes and sometimes evidence of acute vascular change in the fundi. Nephrosis differs from glomerulonephritis in the absence of hypertension and changes in the fundi and usually the absence of erythrocytes in the urine and in the presence of a more severe grade of œdema.

In 1925 after a visit to the Rotunda Hospital, Dublin, I returned to my practice all set—ready to use the medical and hygienic method introduced in that hospital in 1903 by Hastings Tweedy and used by his successors, Henry Jellett and Gibbon Fitzgibbon. They treated eclampsia by intensive gastric and colonic lavage, free catharsis, hypodermoclysis and poultices and claimed a mortality of only 8.87 percent in comparison with the 24 to 66.6 percent shown by English, German and American hospitals in most of which prompt delivery by Cæsarian section was the outstanding feature. Their treatment is based upon the theory that toxins retained in the upper intestinal tract are responsible for eclampsia.

I did not see a case of eclampsia for five years until last summer when I watched a woman die during convulsions a few hours after delivery. This patient, a para-III, was brought to the hospital with severe toxæmia from a nearby small town. I saw her in consultation with her doctor and we agreed to give her free elimination and to hurry up her delivery with the Watson technique—quinine sulphate, castor oil and pituitrin. The woman died of petechial hemorrhages into the brain, liver, kidneys, etc.

Another woman was brought in the next day by the same doctor. She was a para-XII and was very ill with a toxæmia superimposed upon a severe grade of chronic nephritis with anasarca and extreme anæmia. This woman delivered spontaneously but died two weeks later of her nephritis and anæmia.

As John B. Deaver so often has quoted in connection with acute abdominal conditions, "Man knoweth not the day or the hour" when he will be faced with an emergency abdominal condition—so "Man knoweth not" the moment when he will meet up with the vicious, unholy triad of albuminuria, high blood pressure and œdema in the latter months of pregnancy.

It seems superfluous to stress the importance of prenatal care. Prenatal observation of all cases throughout pregnancy and management of all cases showing the first indications of toxæmia is the reason for the great reduction in the number of cases of eclampsia we have been seeing in the last few years.

I am convinced that a strict nephritis diet, salt free, is an absolute necessity as soon as the first indications of toxæmia appear—namely, the aforementioned unholy triad. It is necessary to weigh the pregnant woman every time she comes to the office and after evidence of toxæmia is shown she must be examined frequently. If albuminuria and increased blood pressure are found on two examinations one week apart, the patient should be hospitalized and if this is not possible she must be kept at home on strict management. Heckner and Gassner have estimated the normal increase in body weight in the last trimester to be: seventh month, 2400 Gm. (5.29 pounds), eighth month, 1690 Gm. (3.72 pounds), ninth month, 1540 Gm. (3.39 pounds). This varies in relation to the size of the woman and multiparæ as a rule show greater gains than primiparæ. A woman who shows increase in weight very much in excess of these figures and œdema should be suspected of beginning toxæmia. Even without albuminuria, dyspnœa and cough, the lung bases should be examined for rales. Frequently the evidence of beginning trouble is found just there. A woman with trouble so pronounced that her legs are straight up and down with œdema, that she has a cough with bloody expectoration and marked dyspnœa, can be relieved of her symptoms and lose six pounds in one week by rigid dietary regimen alone. If management has failed to check the advance of toxæmia, and the outbreak of convulsions and coma is imminent, in other words the case is definitely pre-eclampsia, the pregnancy must be terminated at the earliest moment by the method most consistent with the safety of the patient. The choice of procedure depends for one thing upon the condition of the cervix. If the cervix is patulous or already partly dilated the Stroganoff treatment may be used. If the cervix

is rigid, Cæsarian section should be done under morphine and scopolamine and local anæsthesia.

If the case is one of toxæmia superimposed upon chronic nephritis and after hospitalization and dietary management there is no improvement, pregnancy should be terminated no matter whether the fœtus is viable or not. As Williams says, one becomes more and more radical in the treatment of this type of toxæmia.

The low reserve kidney is the most favorable and when this diagnosis is made, the patient is carried through with conservative treatment, the nephritic diet and rest in bed. The low reserve kidney cases usually show prompt response to treatment and may be allowed to go on to full term and spontaneous labor. Even though this type may remain *in statu quo,* it is frequently possible to wait until the fœtus is viable before induction of labor.

Two new methods have been used recently with notably good results in eclampsia. Before describing them the conditions which distinguish mild from severe cases as specified by Eden should be given. Eden classified as severe eclampsia those cases which presented two or more of the following six conditions: (1) persistent coma; (2) pulse rate more than 120; (3) temperature more than 103, (4) more than ten convulsions; (5) urine containing sufficient albumin to coagulate solidly on boiling; (6) absence of œdema. In the Johns Hopkins clinic an albumin content of ten Gm. per liter by Esbach was substituted for the boiling test. One reason why the results (mortality rates) vary so much in various maternity hospitals in the several countries from which reports are published is because some hospitals make no distinction between mild and severe eclampsia. Stroganoff for example has all of his patients showing toxæmia in the hospital and active treatment (morphine and chloral) is begun as soon as convulsions appear. Other hospitals admit patients in every stage of the attack and some of these are far gone when admitted. As you know, Stroganoff's mortality percentage is reported as 2.5, but the great majority of his cases may be classified by Eden's method as mild in type. The children's mortality is 32.3 percent.

The mortality rate in other maternity hospitals using the Stroganoff method with or without modifications range between 5.3 percent (Zweifel) to 21.3 percent (Johns Hopkins). Stroganoff's treatment is as follows:

Begin with morphine, gr. ¼, hypodermically.

One hour later, 20 to 40 grains chloral *per rectum.*

Two hours later, morphine, gr. ¼, hypodermically.

Four hours later, 30 grains chloral *per rectum.*

Six hours later, 15 to 30 grains chloral *per rectum.*

Seven hours later, 20 grains chloral *per rectum.*

Chloroform anæsthesia to control convulsions.

Dark, quiet room, careful watching.

No operative interference.

Since 1924 Lazard, Irwin, McNiele and Vruwink have used magnesium sulphate intravenously in eclampsia and eclamptic toxæmias at the Los Angeles General Hospital. Their gross mortality rate in a series of 99 cases was 14 percent in contrast with a gross mortality of 36 percent in the five years preceding 1924. Their routine is to give 20 cc. of 10 percent solution of magnesium sulphate intravenously to every patient with a systolic blood pressure of more than 150. The nonconvulsive patients are classified in two groups: (1) those admitted in labor and found to have a systolic pressure above 150, usually with albuminuria ($MgSO_4$ given as a prophylactic) and (2) frankly toxic cases. In a series of 112, 45 fell in the first group and 67 in the second. Of the 45 in the first group, 3 developed convulsions *post partum.* These three had had the single prophylactic injection. After the development of convulsions, they received further injections and all recovered. Of the 67 admitted to the hospital in a toxic condition, 6 developed convulsions, 5 recovered and 1 died.

Miller and Martinez, Pittsburgh, in October, 1926, began the use of heparmone, a liver extract, in pre-eclamptic and eclamptic cases. They classified the pre-eclamptic cases as mild, moderate and severe. The mild cases received 10 cc. heparmone weekly by intramuscular injections; the moderate cases received 10 cc. two or three times weekly, and the severe cases received 10 cc. two or three times a day until the patient was delivered. The diet was not restricted and no other medication was used. Total number cases in series 255, of which 101 were mild, 95 moderate and 50 severe. In this series were 84 patients with nephritis who, though not showing any improvement in blood pressure or urinary condition, were allowed to continue their pregnancy to spontaneous labor. Four developed eclampsia, one from the moderate group and three from the severe group. One case of fulminating toxæmia proved fatal, patient died within ten minutes after the first convulsion. There were forty-three patients who were in eclampsia when first seen and treatment instituted. Of these, three died —a mortality rate of 6.9 percent. In this series of eclampsia the patients were given as much as 10 cc. heparmone intravenously or intramuscularly every fifteen minutes to one-half hour.

So important is the condition of the heart during pregnancy and especially when a damaged heart has to cope with the increased strain placed upon it by toxæmia, nephritis, hepatitis and other phenomena incident to eclampsia that I should like to present the essential points brought out in the collaborative work of B. E. Hamilton, cardiologist, Boston Lying-in Hospital, and F. S. Kellogg, obstetrician to Boston Lying-in Hospital and instructor in Harvard Medical School.

During the seven years preceding this report, 7.5 percent of all the patients seen at the prenatal clinic were referred to the cardiologist because of

conditions suggestive of heart disease. These cases were grouped and each group studied separately. The most important and largest group was (1) rheumatic heart disease. Other groups were: (2) congenital heart disease, (3) cardiovascular syphilis, (4) hypertensive heart, (5) thyroid heart and (6) disorders of the heart beat, viz., paroxysmal tachycardia. Another large group could not be diagnosed definitely as having heart disease nor dismissed as not having heart disease. These were listed as "possible" heart disease and included those women whose principal finding was a more or less loud systolic murmur. Still another important group were those women sent to the cardiologist for symptoms suggesting heart disease, as breathlessness, syncope, pain in the region of the heart, simple tachycardia and extra systoles.

For purposes of obstetric control, all cases referred were separated into three classes. In Class 3 were placed those women who definitely did not show organic heart disease. The majority were cases of cardiac neurosis or neurocirculatory asthenia. In a consecutive series of 149 patients at the Boston Lying-in Hospital so classified, there were no maternal deaths. Only one such patient in private practice died suddenly and unexpectedly after a Cæsarian operation—no autopsy permitted.

Class 2 included all the "possible" heart disease cases, the rheumatic heart disease cases, congenital heart disease and any other cardiac condition unassociated by clear signs of severe cardiac injury. In a series of 276 such cases there were two deaths. None showed signs of decompensation. The two deaths were from complications not associated with the heart.

Classes 3 and 2 patients have been treated as if they were normal so far as the heart was concerned.

Class 1 included those women with severely damaged or "disordered" hearts. With few exceptions they showed a considerable enlargement of the heart or a diastolic murmur, or both. A very few were included because of the very loud or harsh systolic murmur accompanied by a thrill with usually additional signs of an injured heart. In a consecutive series of 252 cases in Class 1 there were 21 deaths and 73 who showed definite indications of decompensation.

They learned that patients in Class 1 who have or have had heart failure or an auricular fibrillation or a hypertension do not tolerate pregnancy well and these conditions constitute the criteria for differentiating the bad from the good risks. In addition, those women with mitral stenosis do not withstand the added burdens of pregnancy. Acute rheumatic fever, for cardiac reasons, contraindicates pregnancy for at least one year.

Effort tests and vital capacity determinations have no practical value in differentiating the bad risk from the good. The important point in the prognosis is whether they are controlled and treated properly.

Most of the cardiac patients who die in pregnancy die of ordinary congestive heart failure. The causes of the heart failure, in addition to the pregnancy itself, are (1) overexertion, and (2) infections, as colds, grip and tonsillitis. Therefore, each heart patient must receive detailed instructions as to hours for rest and hours for exercise. Each cardiac patient must go to bed with the slightest illness and notify her attending physician.

The first reliable objective sign of heart failure is persistent rales at the lung bases. Every one of these women must be examined at least once a week for this evidence of pulmonary stasis. There may be no objective symptoms whatever, and no other findings on physical examination except rales at the bases of the lungs. The first subjective symptoms are usually dyspnœa and cough on exertion or after lying down and sometimes hæmoptysis.

When failure once occurs the woman must be placed in the hospital or under conditions at home as nearly like hospitalization as possible. As in toxæmia, these are cases where "judgment is difficult and experience fallacious." The rule may be set down definitely, however, that in spite of the desire for a viable child, pregnancy must be terminated if proper treatment does not relieve the decompensation within a few hours or days. It is much better to deliver *after* the acute symptoms of heart failure are relieved and of course delivery is done by the quickest method most consistent with the safety of the patient. In competent hands, Cæsarian section is the easiest and quickest way and of course under morphine and scopolamine and local anæsthesia.

Edward C. Lyon, Jr., Woman's Hospital, New York, made a study of anæmia in the third trimester of pregnancy based on blood counts taken in 200 cases. Because of the case mentioned above who died of her nephritis and anæmia, Lyon's summary is interesting:

1. Among these 200 patients, 125 were between the ages of twenty-one and thirty years; 131 were primiparas; 27 showed symptoms of toxæmia and 2 had positive Wassermann reactions.

2. There were 177 cases in which blood examination was made at term. The average hemoglobin of this group was 75.3 percent.

3. Among these 177 patients who were examined at term there were 57 whose hemoglobin was 70 percent or less; *i. e.*, 32.2 percent approached their labors with an undesirably low hemoglobin.

4. Among the 200 cases there were 76 in which some time during the third trimester there was a hemoglobin of 70 percent or less. Ten of these (13 percent) had a toxæmia; none had syphilis; 55 (72.3 percent) were primiparas, and 11 (14.4 percent) had borne only one child previously.

5. A control series of 100 non-pregnant women with retroversions showed an incidence of 32 percent who had a hemoglobin of 70 percent or less on admission to the surgical wards.

6. Of these 200 patients, 42 had repeated blood counts during the third trimester; 16 of these (38 percent) showed a gain in hemoglobin and 20 (47.6 percent) showed a fall in hemoglobin. Of the 20 with a falling hemoglobin, 12 reached term with a hemoglobin of 70 percent or less.

CONCLUSIONS

1. Although every pregnant woman reports for examination and is watched by her attending obstetrician throughout her pregnancy her last three months are most important.

2. The previous history of every pregnant woman, especially regarding rheumatic fever, heart disease, kidney disease, anæmia, previous pregnancies and deliveries—any previous illness must be written down and taken into consideration.

3. The first appearance of the "unholy triad," albuminuria, increased blood pressure and œdema, in any patient makes that patient a potential casualty. The attending obstetrician can reduce his mortality rate in these cases to almost *nil* by proper management.

4. The treatment of toxæmia and eclampsia with heparmone or magnesium sulphate intravenously offer more according to the figures and percentages of Miller and Martinez and Lazard, Irwin, McNiele, Vruwink, Dorsett and Rucker than Cæsarian section. The low mortality rate (2.5) reported by Stroganoff must be taken seriously into account.

5. Blood chemistry and blood counts must be studied in certain individual cases.

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THE TREATMENT OF HAY FEVER (POLLENOSIS)*

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Seasonal hay fever, or pollenosis, affects one percent of our population (Scheppegrell[1]) and produces much discomfort and suffering among those allergic to one or more pollens. Avoidance of symptoms by removal to a locality relatively free from pollen has long been practiced by some patients sensitive to the weed pollens. Northern Michigan, the seashore, and the White Mountains of New Hampshire are popular refuges for these sufferers, and while the atmosphere of these places is not at all times free from pollen they do offer a substantial measure of relief.

However, not all people, for financial or other reasons, can leave home for several weeks each summer and travel a considerable distance to one of these resorts, and for them air filters have been devised by Cohen.[2,3] These filters are ninety-nine percent efficient in rendering the air of a room pollen-free. Cohen has found that patients by remaining in such rooms a number of hours each day may go through the season very comfortably. Modern forced ventilating systems which filter and wash the air which is delivered, either cooled or heated, throughout a building are becoming more and more popular. So far as I can learn, none of them have sufficiently fine filters to remove much of the pollen from the air, but such filtration could be achieved easily. In years to come we may see patients with all types of inhalation allergies, living in apartments and working in office buildings supplied with properly filtered air, which will give them relief from their symptoms.

To reduce the pollen content of the air by weed-cutting campaigns long has intrigued the minds of many people. It is doubtful whether these weed-cutting campaigns will decrease appreciably the pollen content of the air in most localities, since they are carried many miles by the wind. Chicago, with its prevailing winds off the lake, would seem to be an ideal place for testing such a procedure. In 1929 this was done, and while the pollen content of the air was reduced considerably, the actual relief to hay fever sufferers was negligible.

The majority of our patients cannot spend several weeks each year in a climate with a low pollen content, neither can they afford filtration of the air in their homes. Until recent years the medical profession has been able to offer these patients very little relief. Noon[4] in 1911 and Freeman[5] in 1914 published their results with hyposensitization treatment. Since that time a great deal of work has been done on the many problems of hay fever. At the present time it is the best understood of all the allergic diseases, and most physicians are convinced of the efficacy and rational basis for hyposensitization therapy. In fact, there are few conditions in which the physicians may expect better results from treatment.

In the management of hay fever, four questions are of paramount importance:

(1) To what pollens is the patient exposed?
(2) To what pollens is he sensitive?
(3) What dosage of pollen extract will be necessary to desensitize him?
(4) How may constitutional reactions be avoided?

If the physician can answer each of these questions accurately, he may expect confidently well-nigh perfect results from treatment.

1. To what pollens is the patient exposed?

The answer to this question is possible only after a detailed study of the territory in which the

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patient lives. Fortunately, such a study has been made in Indiana by Mr. O. C. Durham,[6 7] who has reported not only the flora, and the time of their pollination, but also has made some valuable studies on the pollen content of the air during the pollenating seasons of the trees, grasses and weeds. The pollens causing hay fever are air-borne. Rarely some of the heavy ones, such as golden rod, aster and corn, may cause symptoms in persons coming in close contact with them.

The first pollens to make their appearance are those of the trees, the more common ones being maple, elm, box elder, cottonwood, ash, oak and walnut. These appear during the latter part of March, and some of them are in the air until mid-May. They are not of great importance, however, because the period of pollination for each genus is short, the amount of pollen relatively small, and the exposure not great, unless the contact is close.

The grasses follow the trees, appearing during the latter part of May and lasting until late July. There are 200 species of grass in Indiana, but fortunately it is not necessary to test our patients to all of them. Aaron Brown[8] has proved that patients sensitive to one species of a genus are sensitive to all. Hence, it is sufficient to test our suspected grass cases to timothy alone. English plantain is a factor also at this time, appearing early in June and lasting until late July. It should be borne in mind that the plantains and the grasses, while pollinating at approximately the same time, belong to two separate distinct families, and therefore separate extracts must be used in testing and treating.

about August 15th, and continue until the first real frost, the maximum amount of pollen coming about September 1st. However, the ragweeds are not the only offenders at this season. While they are of less importance, the amaranth group (pigweed and spiny amaranth) and lamb's quarter are frequent offenders.

2. To what pollens is the patient sensitive?

It is essential that the offending pollens be detected, if desensitization is to be carried out. Knowing the air-borne pollens occurring in the vicinity, and the time of their pollination, we may limit our tests to those pollens present at the time symptoms occur.

In testing, we may use the scratch or the intracutaneous methods. In the case of pollens, it should be borne in mind that these testing extracts are very powerful. Therefore, the use of the scratch method is urged, as serious constitutional reactions have resulted from the parenteral introduction of strong pollen extracts in the performance of the intradermal test. The scratch test is also simpler to use, and while less sensitive than the intra-cutaneous method, allergic patients usually give definite reactions with it.

Usually pollen sensitivities are multiple, patients reacting to more than one, and unless these pollens are related closely botanically, desensitization with extracts of each of them must be carried out.

3. What dosage will be necessary for desensitization?

The rationale of the treatment is to build up in

POLLEN CALENDAR FOR INDIANAPOLIS

BOTANICAL NAME	POPULAR NAME	DATES OF POLLINATION						
		March	April	May	June	July	Aug.	Sept.
Acer Sascharimum	Maple	xx	x					
Ulmus Spp.	Elm	x	x					
Acer Negudo	Box Elder		xxxx					
Populus Deltoides	Cottonwood		xxx	x				
Fraxinus Americana	Ash		xxx	x				
Quercus Spp.	Oak			xxxx				
Jaglous Nigra	Walnut			xxx	xx			
Rumex Crispus	Yellow Dock			xx	xx			
Hicoria Spp.	Hickory			xx	x			
Rumex Acetosella	Red Sorrel			xx	x			
Poa Pratensis	Blue Grass			x	x			
Plantago Lanceolata	English Plantain				xxxx	xxx		
Dactylis Glomerata	Orchard Grass				xx			
Poa Compressa	Canada Bluegrass				xx			
Phlenum Prateuse	Timothy				x	xxx		
Chenopodium Album	Lamb's Quarter					xxxx	xxxx	xxx
Amaranthus Spinosus	Spiny Amaranth					xxxx	xxxx	xxx
Agrostis Palustris	Redtop					xx		
Amaranthus Retroplexus	Pigweed					xx	xxxx	
Acnuida Tamariscina	Western Water Hemp					xx	xxxx	xx
Cannabis Sativa	Hemp					x	xxxx	xxx
Zea Mays	Corn						xx	
Xanthium Spp.	Cocklebur						xxxx	xx
Ambrosia Trifida	Giant Ragweed						xxx	xx
Ambrosia Elatior	Short Ragweed						xx	xxx
Ambrosia Bidentata	Southern Ragweed						xx	x
Iva Ciliata	Marsh elder						x	x
Syntherisma Sanguinalis	Crab Grass							xxxx
Artemisia Annua	Annual Sage							xx

This table compiled from data furnished by O. C. Durham. The plants are arranged chronologically.
X indicates approximately one week.

Following the grasses, we come to the fall, or late, hay fever season, dominated by the ragweeds. Both giant and dwarf ragweed begin to pollinate

the patient, by gradually increasing doses of extract, a tolerance to the pollens to which he is sensitive. Treatment should be begun at least six

to eight weeks before the expected onset of symptoms. While desensitization may be carried out during the hay fever season, it is much less effective than pre-seasonal treatment, and the danger of provoking serious constitutional reactions is so great that it should not be resorted to by those who are not experienced in the method.

To determine the initial dose, skin tests should be done with various dilutions of the extract, and treatment begun with a dilution too weak to give rise to any skin reaction.

The more sensitive the patient, the smaller the amount of extract necessary to desensitize him. However, it is not possible to ascertain, for any given patient, just what his maximum dosage should be. It is probably best always to build up the dosage as high as possible. Much larger dosage is necessary to protect our patients in Indiana, where they are exposed to large amounts of pollen, than is necessary in those sections of the country where the pollen is much smaller in amount. Commercial extracts are being made much stronger than formerly, and results from their use are proportionately better.

As to the intervals between treatments, Duke[9] and Scheppegrell[10] recommend short treatment intervals, repeating the injections every day, or even twice daily. On the other hand, Van der Veer, Cook and Spain[11] and others stoutly maintain that treatments should not be given more often than every five to seven days. When the patient presents himself early enough, the more conservative method of injections at longer intervals is undoubtedly best. However, when tolerance must be built up rapidly in patients beginning treatment late, the shorter treatment intervals may be used for the smaller dosages, gradually increasing the time between injections, as the larger dosages are reached.

Treatments must be continued until well past the peak of the pollen season. Failure to continue treatment long enough is responsible for many of the disappointing results in this work. Many practitioners wrongly assume that with the onset of the pollen season, patients will absorb enough pollen through the mucosa of the upper respiratory tract to maintain their tolerance.

The recital of the procedure followed in a typical case will illustrate several points: Miss D. B., age twenty-eight, presented herself for treatment on June 1, 1929. She complained of hay fever, which had occurred seasonally during the last five years. Symptoms each year came on about August 15th, and persisted until the first frost. The time of her symptoms tells us that her sensitivity is to one or more of the weed pollens. There are only a few such air-borne pollens in Indiana. Therefore, we did skin tests with extracts of these pollens, and found her reacting strongly (4) to dwarf ragweed, mildly (1) to giant ragweed, and mildly (2) to annual sage. A treatment set was made up, consisting of mixed ragweed ninety percent and annual sage ten percent, these proportions being used because the patient was exposed to much more ragweed than sage pollen. Next the patient was tested with various dilutions of this combined extract. She reacted on skin testing to dilutions of 1-100, 1-1,000, 1-10,000, but failed to react to a dilution of 1-100,000. Hence treatment was begun with a dilution of 1-100,000, and the following treatment intervals and dosages were used:

Date	Dose Number	Dose	Dilution	Pollen Units
6/8	1	.2	1-100,000	2
6/12	2	.3	1-100,000	3
6/15	3	.5	1-100,000	5
6/18	4	.7	1-100,000	7
6/22	5	.1	1-10,000	10
6/25	6	.4	1-10,000	40
6/29	7	.7	1-10,000	70
7/2	8	.1	1-1,000	100
7/6	9	.3	1-1,000	300
7/9	10	.06	1-100	600
7/13	11	.12	1-100	1200
7/18	12	.24	1-100	2400
7/23	13	.32	1-100	3200
7/29	14	.42	1-100	4200
8/2	15	.43	1-100	4300
8/6	16	.48	1-100	4800
8/12	17	.5	1-100	5000
8/19	18	.5	1-100	5000
8/26	19	.5	1-100	5000
8/31	20	.5	1-100	5000
9/7	21	.5	1-100	5000
9/14	22	.5	1-100	5000

It will be noted from the above schedule that the patient's tolerance was built up to a high point before the expected onset of symptoms, and was maintained at this high point until the peak of the season was well passed.

In gauging each dose, the effect of the previous one should be ascertained. If marked local reaction occurs, the following dose should be decreased, or maintained at the same amount as the previous one. Dosage for each patient must be carefully individualized. Commercial treatment sets, containing a series of measured doses, leave no leeway for individualizing the treatment, hence they are dangerous to use routinely on patients of varying sensitivity.

4. How may constitutional reactions be avoided?

These are the *bete noire* of the physician treating hay fever. In spite of the most extreme care, reactions will occur occasionally. They usually come on within a few minutes after an injection, and are manifested by hay fever, asthma, general urticaria, faintness, sweating and generalized œdema. The treatment is the prompt administration of a fresh, reliable solution of adrenalin at, or just above, the site of the injection. This may well be repeated in five or ten minutes if relief is not prompt. Since these symptoms usually come on within a few minutes after an injection, patients should remain in the office for thirty minutes following each treatment, and the physician should have at hand a hypodermic syringe loaded with adrenalin for prompt use, in case of need. Since the rapidity with which the extract reaches the blood stream has much to do with the likelihood of reactions, care should be taken that the syringe needle does not enter a blood vessel. Hence injections should never be made into the muscle, but into the subcutaneous tissue, and the plunger of the syringe should be withdrawn slightly to make sure that the needle has avoided a vessel. It is good practice to leave the injection in a lump, thus perhaps showing the rate of its absorption somewhat.

The careful noting of the local effect of the previous dose is an important precaution, the dose being decreased or maintained stationary if much local reaction followed the treatment.

Regularity of treatments is also important. During treatment, the patient's tolerance fluctuates greatly. Unless treatment intervals remain fairly constant, it is much more difficult to avoid reactions. During the course of treatment, when patients find it necessary to miss one or two injections, the safe procedure is to drop their dosage well below that which they received last, and then build it up again as rapidly as possible.

Some physicians make it a practice to administer ephedrine hydrochloride gr. 3/8 *per oram* a few minutes before each injection. Adrenalin may be given, mixed with the pollen extract.

Results of Treatment. The success of treatment varies inversely with the amount of pollen to which the patient is exposed. The early type of hay fever due to tree pollens is most satisfactory to treat, as these patients are exposed to relatively small amounts of pollen and for a brief period only. The grass cases are a little more difficult to treat, yet they usually do well. The fall type, due to the weed pollens, present in great abundance, are the hardest of all to treat successfully. Figures gathered from various clinics throughout the country show that we may expect thirty-five percent of our patients to obtain complete relief; fifty percent will go through the season with very little discomfort; ten percent will obtain only slight relief, and five percent will be uninfluenced by treatment. In other words, treatment is successful in eighty-five percent of cases, and unsuccessful in fifteen percent. Treatment fails in this latter group undoubtedly because we have failed to find the offending pollen, insufficient dosage has been used, or the injections have been discontinued too soon.

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PRACTICAL POINTS IN INFANT FEEDING*

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The study of infants and children has enjoyed the efforts and resources of physicians as a specialty for a comparatively few years, but during those years a solid and substantial framework has been erected which today serves as a means of sane approach to these little patients. If this is true of pediatrics as a whole it is particularly true of one phase of pediatrics: namely, infant feeding. The fact that many types of foods have been introduced to take the place of mother's milk does not mean that infant feeding is in an unorganized state. All of these foods have been formulated from accepted food standards and only represent different means of arriving at the same end. If it is true that such a formidable bit of knowledge is available then surely it should be disseminated so that it may do the most good.

The general practitioner has accepted the infant and its feeding problems as a necessary evil in his daily practice. Many feeding formulas are arranged from printed tables or revolving discs furnished by food manufacturing concerns. The needs of the individual infant are entirely lost sight of, as he is placed on a printed schedule that has been tabulated by some individual perhaps hundreds of miles away. It is unfortunate that so many physicians are depending upon this sort of knowledge in arranging diets and correcting diet irregularities. After all, the fundamentals of infant feeding are simple compared to other medical problems. It is still more unfortunate that this knowledge is not more widespread, since it can be obtained from innumerable textbooks on pediatrics. This fact we must admit, that the marked reduction in infant mortality has had as its basis the proper application of knowledge concerning food and its place in the infant's daily regimen. We are faced with a further fact that the efforts of many physicians to further their comprehension and knowledge of medicine in general do not as a rule include an effort to further their knowledge concerning the methods used to organize a milk formula or to correct a diarrhea from a dietary angle. Many physicians who have spent months in post-graduate study, either in this country or abroad, in all the branches of medicine, have failed to spend even one day in a feeding clinic, but still on returning to their offices continue to meet feeding problems and attempt to correct them by indirect and often fatal methods. I would like to feel that they already have been well informed on this phase of pediatrics, but unfortunately this is not true. It is with these thoughts in mind that I have had the courage to come before this society and briefly present some accepted methods con-

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cerning the infant and his food, a subject that has been yours for the asking all these years; a subject that has been rehashed and presented before medical societies countless times before.

Let us first concern ourselves with baby's food and what we should expect from it. The essential requirements are: First, that it must furnish the necessary calories; second, it should be easily assimilable and digestible; and, third, it must maintain nutrition and in addition allow for growth. These essentials are of course furnished by the components of all foods, namely: protein, fat, carbohydrates, mineral salts, water and vitamins, and the part that each plays is as follows:

Protein: Replaces the nitrogenous waste and is also used for the construction of the body cells. It is best handled when limited to one or one and one-half percent.

Fat: Supplies heat and energy in big quantities. It is also a nitrogenous waste saver and in addition increases the body weight by storing fat. When furnished in quantities of three to four percent, it is usually digested easily.

Carbohydrates: When given in quantities of five to seven percent are readily assimilated and replace fat waste and also supply heat and energy.

It is best to remember that infants up to ten pounds in weight should not receive over one ounce of sugar, while those weighing over ten pounds may have one and one-half to two ounces per day.

Mineral salts are present in sufficient amounts in both human and cow's milk and do not as a rule present any unusual problem.

Water comprises eighty to ninety percent of all mammals.

Vitamins are present only in small quantities in milk and are necessary for the proper utilization of food and the prevention of certain dietary diseases.

Next let us concern ourselves with the infant. For practical purposes most infants fall into one of these three groups:

(1) Well-developed babies who need forty to forty-five calories per pound per day in order to grow.

(2) Moderately thin babies who need fifty to fifty-five calories per pound per day, and

(3) Emaciated babies who cannot gain on less than sixty to sixty-five calories per pound per day.

Usually up to five months of age, feeding every three hours during the day and every four hours at night best suits the baby's needs. After five months a four-hour schedule is best and the two a. m. feeding can be dropped. Often the baby will do better on the four-hour schedule from the start. The quantity of food needed is usually computed by adding two ounces to the age of the baby in months, but not giving more than eight ounces at a feeding. For example by adding two ounces to the age of a four-month baby you would get six ounces as the quantity desired. While this is not by any means a scientific procedure it is very practical.

To determine the number of calories needed simply multiply the weight in pounds by the caloric requirement. An example of this rule would be as follows: Given a moderately thin infant weighing eleven pounds and needing fifty calories per pound, multiply eleven by fifty, which will give you five hundred fifty calories required.

The next problem confronting us is how to determine the amount of milk needed. We know that all of the calories will be supplied by the sugar and milk. If we take the case just cited we can give at least one and one-half ounces of sugar, since the baby weighs over ten pounds. Since one ounce of sugar furnishes one hundred and twenty calories, one and one-half ounces will furnish one hundred and eighty calories. This figure is subtracted from the total caloric requirement: namely, five hundred and fifty-five, leaving a balance of three hundred and seventy calories to be supplied by milk. Each ounce of milk in turn gives twenty calories and three hundred and seventy divided by twenty gives approximately nineteen ounces of milk needed in this particular formula.

The quantity of water that is needed is determined by subtracting the quantity of milk from the total quantity of fluids needed as already figured by adding two ounces to the age of the baby in months. The baby's gain should be six to eight ounces a week during the first six months, three to five ounces the second half of the first year and about one-half pound a month during the second year.

Breast-fed babies should be weaned by nine months, as breast milk undoubtedly has served its purpose by that time.

Additions of diet to the breast or milk formula during the first year can be arranged or varied to suit individual needs, but the following scheme is conservative and practical:

Orange or tomato juice can be added at six weeks.

Cod Liver Oil or Viosterol at two months or earlier if indicated.

Cereals at five months if baby needs additional calories.

Vegetables: Spinach, carrots or vegetable broths at six months.

Egg yolk at seven months, apple sauce and prune pulp at eight months.

Beef juice at ten months as well as additional vegetables such as peas, string beans, and cabbage.

Whole egg, bacon and whole milk at one year. Important additions during the second year are meats, and milk desserts at fifteen months.

After a consideration of the manner in which formulas are computed and introduced we can proceed to a study of some of the irregularities in infant feeding. For convenience we will consider breast-fed and bottle-fed infants separately, and

under each we will consider diarrhea, vomiting and constipation.

In breast-fed infants, diarrhea does not present nearly as difficult a problem as the same condition does in bottle-fed infants. The usual causes are:

(1) Overfeeding. This is especially true in cases where the breast milk is plentiful and the baby is a vigorous sucker.
(2) Illness of mother, causing a change in the character of milk. The breasts of many mothers are peculiarly sensitive to slight changes in the mode of living and to acute illness, and the milk is immediately affected.
(3) Complemental feedings. In this case the breast milk is not at fault.
(4) Illness of the baby. Under these conditions a lowered functional capacity makes it impossible for the baby to handle the usual amount of food.

In the treatment of overfeeding it is best to lengthen the feeding intervals and either give some water before giving the breast or reduce the amount of nursing. Where the mother is ill remove the baby from the breast for a twelve-hour interval and give several ounces of water before each nursing. In cases where the complemental food is the cause, remove it from diet entirely and add calcium caseinate or protein milk. If the infant is ill the underlying trouble should be corrected, and in the meantime the amount of nursing should be reduced and water given freely.

Vomiting in breast-fed infants is seen oftener than diarrhea. The causes are usually (1) acute indigestion, (2) too much milk, and (3) organic causes. If the vomiting is acute, temporarily discontinue all food, empty the bowels, wash out the stomach and give small quantities of sodium bicarbonate by mouth. If the milk is too rich reduce the amount of nursing to avoid the last part of the milk, which is richest in fat. If the vomiting is chronic in nature, shorten the nursings and lengthen the intervals, with gradual return to a full feeding. Atropine is of much value in these cases. In organic conditions it is best to determine the pathological conditions present. While pyloric stenosis can be carried along for a while on medicinal treatment, intussusception needs immediate surgical interference.

Constipation in the breast-fed infant may be due to (1) much vomiting, (2) insufficient breast milk and (3) constipation of the mother. Treatment in these cases is self-evident. The vomiting should be corrected, complemental feedings added to the diet if necessary, and regulate the mother's bowels. If further help is needed add additional sugar, prune juice and mineral oils to the baby's diet.

In bottle-fed infants the diarrheas present an entirely different problem. The diarrheas can be classified as follows:

Infectious:

Fermentative, the causative factor being the sugars and starches.

Putrefactive, protein the offending food.

Ileocolitis, the result of some bacillus, such as the colon bacillus, the Shiga or Flexner dysentery bacilli, or the streptococcus.

Cholera infantum, in which no organism has been isolated.

Dyspepsia:

Simple intestinal indigestion from fats, sugars and protein.

Mechanical:

Due to undercooked starches and various foods not fit for children.

Cathartics

Organic:

Such as typhoid, tuberculosis and amœbic dysentery.

The treatment of the diarrheas can be stated briefly under two heads. The protein diet is indicated in most cases of diarrhea in infants below one year of age. No other food is to be given until the stools become normal again. The carbohydrate diet is indicated in all cases of putrefactive diarrhea usually occurring in infants during the late months of the first year and during the second year. During these months the carbohydrate diet is a therapeutic test of the type of diarrhea present. If there is no improvement, protein is not the cause of the diarrhea and very likely improvement will follow the use of a protein diet. The carbohydrate diet usually consists of barley water and later barley cereal and toasted white bread. Where cathartics are at fault, they should be removed and where some organic condition is the cause, that condition should be treated.

The causes of constipation in bottle-fed infants can be listed as follows:

1. Too little sugar.
2. Too much fat.
3. Excessive vomiting or anorexia.
4. Too weak food with very little residue.
5. Boiled milk.
6. Habit.
7. Organic lesions such as fissure.

The treatment in these cases consists in correcting the causative factor, such as increasing food intake, adding sugar, decreasing fat, raw milk if necessary, and correcting organic lesions.

Vomiting in bottle-fed babies usually is associated with any disease, or simple in nature. It may be habitual, or be present in hypertonic babies, or as a result of too much fat. Often organic causes such as pyloric stenosis or intussusception may be the cause.

In all inorganic cases stop all food temporarily, give an enema and wash the stomach if necessary. Sodium bicarbonate can be started by mouth. Where the vomiting is due to the swallowing of much air, hold infant over shoulder to assist in eructating the air. In cases of hypertonic babies, atropine is valuable.

Anorexia is usually due to inanition, a limited digestive capacity, or local pathological conditions of the mouth. The treatment is often unsuccessful.

For the weak infants use a Breck feeder. Lengthened feeding intervals are often helpful and occasionally lavage is necessary.

There has been no effort to include in this paper severe gastro-intestinal disturbances or to discuss organic conditions as a cause of food irregularities. The attempt has been only to give a brief resume' of the more common conditions met in private practice.

Discussion

J. B. Rogers, M.D. (Michigan City): There seems to be very little to discuss about many of the points the essayist brought out. The number of feedings in twenty-four hours is always an open question, and one upon which we do not all agree. I prefer four-hour feedings from birth if they will tolerate it. Once in a while a youngster objects, and if they are not gaining I put them on three-hour feedings until they are three months old, when they should not need anything from nine at night until six in the morning.

As to the quantity of food needed, we always have the breast milk analyzed, and if it has the required amount of fat and carbohydrates I try to determine the frequency of the nursings, not less than three hours, by the amount of weekly or daily gain. I think the quantity of food must be determined by the quality. The amount of milk needed of course can be determined by the scale, weighing before and after, nursing and if the child is not gaining, that can be taken care of by the supplemental feeding in the case of a breast baby.

As to the quantity of water, you have all seen cases where when the baby puts up a howl they give it a bottle of water to keep it from crying. I believe a small quantity of water or vegetable juice should be given several times during the day —never over an ounce or an ounce and a half at one time.

As to weight gain, I like to see a baby gain at least five ounces a week. If it is a breast-fed baby and does not gain at least five ounces a week you should give it supplemental feeding.

Additions to diet—I think we all agree with Doctor Raphael. I begin with vegetable juice and broths quite early, some time before the fourth month. I have never found any cause to change that. Then cereal and meat juice I give about as Doctor Raphael does. With the breast-fed baby, if the milk is of satisfactory quality, I have not had cause to worry, provided I can get the mother to nurse the baby at regular intervals. The bottle-fed baby is the greatest problem. The man in general practice knows that before he is called they have given the baby everything from straight cow's milk to Eagle brand, and the baby is pretty well upset before the physician is called. I am not much of a stickler for diet, provided it contains a balanced amount of carbohydrates, proteins and fat. We have many fool-proof foods on the market, and they are fool-proof—stir them up in water and give them to the baby. They are fairly well balanced provided you add cod liver oil, fruit juice and tomato juice. Often with some food, or with Eagle brand if the baby is gaining and looks well, I add an antiscorbutic or antirachitic food and let it go at that. I never change the diet if the baby is doing all right.

A. C. Worley, M.D. (Fort Wayne): Protein is one of the most important factors to consider in infant feeding. We must have sufficient protein in the diet to provide for tissue repair and growth. In some of the proprietary foods the proportion of carbohydrate is so high that the infant's appetite and his caloric requirements are satisfied before a sufficient amount of protein has been taken. The essayist has indicated the optimum amount of protein to be included in the formula. A much greater quantity, however, may be allowed, providing it is modified so that it may be handled by the infant's digestive apparatus.

All the methods of modification in common use —acidification, alkalinization, addition of cereal water, etc., accomplish one thing—they make the curd smaller so that more surface is presented for the action of digestive ferments. Boiling, or evaporating milk does the same thing, thereby making it more digestible, and in my opinion only boiled or evaporated milk should be used in the formulæ for infant feeding. It is as good as raw milk except for a possible lack of vitamins, which may be supplied from other sources.

EPIDEMIC ENCEPHALITIS LETHARGICA*

(WITH REFERENCE ESPECIALLY TO THE TREATMENT OF PARKINSONIAN RESIDUE)

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Epidemic encephalitis lethargica, known better by its misnomer, "sleeping sickness," is particularly a pertinent subject at this time in view of the present epidemic of influenza. If we agree with Flexner[1] that epidemic encephalitis has certain chronological relationships with epidemic influenza, even though it be held that it is a separate and independent disease, we should be on the lookout for unusual neurological manifestations which ordinarily escape our diagnosis.

Two thousand articles by the leaders in neurological fields have appeared since the description by von Economo in 1916-17 of what he termed lethargic encephalitis. Von Economo's description focused the attention of medical men on neurological syndromes before obscure and unsatisfactorily explained. Subsequent epidemics, often pandemic, have still further emphasized the desirability of research in this new field of neuropsychiatry. During the winter of 1918-19 the disease was pandemic. In 1922-23 it was widespread through-

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out the world. England, at this time, reports 10,000 cases. Japan had an epidemic in 1926 with 40 percent deaths. It is estimated by Hulbert[2] that two percent of all charity patients in neurological clinics have some form of the residual disease of epidemic encephalitis.

So protean and varied are the manifestations of the disease, so obscure the etiology, and unsatisfactory the treatment, that a discussion of them all would be impossible. It is the consensus of opinion that we are observing the evolution of a new disease, and the presence of an epidemic of influenza with subsequent involvement of the central nervous system should be sufficient warning to the physician to be on the lookout for residuals of encephalitis lethargica. Some classification of these complications has been arrived at, the classification of Price being as satisfactory as any: (1) motor; (2) sensory; (3) psychic; (4) ocular; (5) aural; (6) respiratory; (7) glandular; (8) vegetative, *i. e.*, sweating, salivation; (9) miscellaneous.

S. Flexner[1] states that the symptoms are vague and complex because inflammation of the different parts of the brain brings in its train more complex clinical responses than does inflammation of the cord or meninges.

It is the purpose of this paper to review briefly the group of conditions known as parkinsonian states, with especial reference to their treatment with tincture of stramonium. Parkinsonian states comprise an extensive group of clinical entities with a clinical picture of paralysis agitans. The lesion is generally regarded as being one of the extra-pyramidal system, especially the globus pallidus and the substantia nigra. This lesion may be inflammatory or degenerative in character. Here also is the lesion of Parkinson's disease, paralysis agitans, the change in this probably always degenerative rather than inflammatory as in the parkinsonian states.

The fully established symptom syndrome of parkinsonian syndrome is briefly as follows: catatonic-like postures, tremor of the hands, arms and legs, marked lurching and propulsive gait with retropulsion and propulsion, fixed parkinsonian facies, mouth open, drooling of large quantities of saliva constantly, bradykinesia, myalgia, dysphagia, and hyperhydrosis. All these symptoms are present to a more or less degree. It is to be noted that the tremor or parkinsonian residue is coarser than Parkinson's disease. Paralysis agitans appears later in life, parkinsonian residue may occur at any age from seven months to seventy years.

It has long been known that scopolamin was of value in controlling the tremor of parkinsonian residue, as indeed other alkaloids of solanaceæ, atropine and hyoscyamine. Their continued use produced many objectionable side-effects which shortly discouraged their employment over a long period of time. As a result, physicians cast about for a better therapeutic agent. Riggs[3] has employed intravenous injections of sodium iodide. Moll,[4] of Leeds, used hypodermic injections of nicotine. Alford,[5] St. Louis, is a strong advocate of the intravenous injection of ten percent glucose solution in amounts varying from 150 to 500 cubic centimeters. Eden, Yates, Baird[6] believe that hidden foci of infection are the principal sources of the virus, which foci should be sought out diligently and eliminated. McBride and Carmichael,[7] England, give huge doses of sodium salicylate. McClintic,[8] Detroit, reports several cases seemingly benefited after one year by the injection of ninety-five percent alcohol beneath the peri-arterial-nerve bearing sheath, of the carotids, combined with a double superior cervical ganglionectomy. He also injects the carotid bodies. All report good results in certain cases, but the very fact of the use of so many and varied procedures strongly indicates that there is no specific agent to be employed routinely.

I have had four cases of parkinsonian residue, and one case of paralysis agitans under treatment for the past year. In each tincture of stramonium, combined in two instances with scopolamin, has been used. A composite history of the four cases of parkinsonian residue shows that each had an attack of influenza from six months to six years previously, an interval of apparent good health, to be followed by the gradual development of the symptom syndrome of parkinsonian residue. It was noted from the history that the severity of the acute febrile process bears little relation to the intensity of the residual disease process. The interval of apparent good health occurring between the acute phase and the appearance of the degenerative symptoms has no clear explanation. A brief resume′ follows:

Case 1. V. F., male, age thirty-nine, had influenza in 1919, followed by four years of normal living. Began to notice halting speech, bradycinesia, ptyalism, which rapidly grew worse with each year. The typical parkinsonian residue was fully established one year after the first appearance of the initial symptoms, and invalidism was practically complete. The diagnosis of epidemic encephalitis lethargica was made at the Mayo Clinic, but no specific treatment was given. Tincture of stramonium was instituted a year ago. At the present time a check-up reveals the following: ptyalism, the most distressing symptom, was completely relieved, the propulsive gait was ameliorated greatly, myalgia diminished, dysphagia bettered, tremor eighty percent benefited, speech returned in large measure, and life made altogether more livable.

Case 2. H. W., male, age twenty-two, had so-called "brain fever" in 1925 following a severe attack of influenza, followed by comparative normal existence until January, 1927. At this time he began to note a coarse tremor of the left arm and leg. Speech became slow and difficult, ptyalism increased, bradycinesia developed. He was at least fifty percent disabled. Tincture of stromo-

nium therapy was instituted, and after one year he presents the following clinical picture: ptyalism completely controlled, bradycinesia, as indicated by the finger nose test, five seconds, tremor slightly but not entirely satisfactorily controlled but sufficient to enable him to continue earning a living at manual labor.

Case 3. J. W., male, age fifty-six, has had two attacks of influenza, the most severe one in 1920, from which he recovered his usual health in a few weeks. Five years later he began to lose strength, felt weak and exhausted, and would often fall asleep at his work, being roused with no little difficulty. This continued for a year, getting progressively worse, and at the end of nine months parkinsonian syndrome was established. Ptyalism, propulsive gait, somnolence, tremor, of "pill-rolling" character, set parkinsonian facies, bradycinesia and myalgia were all present in varying degrees. He was put on large doses of tincture of stramonium and after a year showed marked improvement, especially in the control of ptyalism, somnolence and myalgia. Tremor was only moderately relieved except when scopolamin was used in addition to the stramonium.

Case 4. C. M., female, age thirty-seven, an inmate in the county infirmary, presents an almost perfect example of therapeutic specificity. In this case the use of moderate doses (30 to 40 min.) tincture of stramonium was nothing short of startling. Whereas before she was a helpless, bedfast invalid, unable even to attend to the ordinary calls of nature, she was transformed into an ambulatory individual, attending not only to her own needs, but helping about the women's ward as well. Her history reveals that she had a severe attack of influenza in 1919, interval health good for four years, fully established parkinsonian residue from 1924 to the present time, so severe as to make her a charge on her relatives. Her present condition is very satisfactory; she is at least ninety percent benefited by stramonium therapy, although at times, when excited, her tremor returns and speech becomes difficult.

Case 5. R. C. female, age seventy-six, has typical paralysis agitans, and her case will serve to illustrate the therapeutic effect of tincture stramonium. Owing to a renal impairment, and her advanced age, her dosage was necessarily small, but even at that she stoutly maintains that pytalism is greatly benefited and myalgia not nearly so severe. The tremor is not at all controlled. Stramonium in these cases does not find as great a place as in its related disease, encephalitis lethargica.

Comment: No claims have been advanced that we have in stramonium a specific remedy for the distressing sequelæ of encephalitis lethargica. But to relieve these unfortunates of their residuals by the continued use of stramonium seems entirely justifiable in view of the fact that there seems to be no contraindications to its use. Its more general employment in large doses is to be urged. It is undoubtedly true that the average dose employed by medical men has been entirely too small to produce the desired clinical effect. A dose of 50 min. is perhaps the minimal average dose. Many patients tolerate even 90 min. with no untoward effects. It is therefore urged that the practitioner push the dosage up to its limit before discontinuing its use or condemning the therapy. A great deal of evidence has been accumulated from all parts of the country advocating this method of treatment, sufficient optimistic and happy results have attended its use by a great many clinicians, that it seems proper to urge its more general acceptance and employment.

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ESTIMATION OF PERMANENT DISABILITY IN INDUSTRIAL ACCIDENTS*

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The advent of state compensation laws, requiring remuneration for permanent damage resulting from accidents, has created a new problem for the medical profession; namely, that of estimating the *amount* of permanent disability remaining after injuries. Both verbally and in writing, compensation judges and others have not infrequently found reason for criticizing the variation of estimates of disability made by physicians in any given case. In practically all states specific schedules have been established for death, total permanent disability, loss of vision, amputations and other specified injuries; aside from these there are a great many types of partial disabilities which physicians are called upon to estimate. No rules are laid down as to how conclusions shall be arrived at, and it is in these cases that are often found such wide variations of opinions. Many reasons have been advanced for the existence of such variations; one man may have in mind the structural defect; another the effect of the impairment on the man's present efficiency; another of its effect on his future earning capacity or on his chance of procuring a job elsewhere. These facts indicate that those making the estimates are each

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no doubt honest and sincere, but they have failed to meet on common ground; therefore, the wide variation in estimations that often exist in the same case. Furthermore, many compensation judges fail to be impressed by a causal inspection of the injured part, a squeeze of the hand, or a manipulation of the joint—and then a guess as to the amount of disability. In fact, it is the expressed opinion of some of the courts that the percentage of disability cannot be actually determined, and that, therefore, one guess is as good as another. Other factors that offer complications are that most cases can be rehabilitated and in large industries with a diversity of jobs many injured employees, by special training, may be fitted for jobs which yield greater earnings than before injury.

History of Compensation Laws. A review of the literature on this subject shows that compensation laws originated in Germany in 1884, with similar laws in England and France in 1897 and 1898. These laws concerned themselves principally with establishing fixed and arbitrary amounts for injuries involving structural changes such as amputations, loss of sight or hearing, or ankylosis of joints. These schedules were adopted freely from the schedules of private insurance companies then in existence. Compensation schedules in this country have been based largely on those of foreign countries.

In the United States the International Association of Accident Boards and Commissions have done much toward standardizing the values of various parts of the body for purposes of calculating accident severity rates. They have not, however, suggested any uniform method of estimating permanent disability. Likewise, the National Industrial Conference Board in its publication, "Uniform Medical Provisions for Workmen's Compensation Acts in the U. S.," does not discuss this phase of the subject.

E. E. Holt (Portland, Maine), in a rather elaborate paper, has advanced what he terms the "natural science method," by which he advocates and maintains that permanent damage to any part of the body can be calculated rather accurately by a uniform mathematical formula corresponding very closely to the method of measurement of electricity. This is probably of little practical importance to the medical man, but has no doubt been an important contribution to industrial commissions in arriving at fixed values for specific disabilities such as amputations, loss of vision or of hearing. By this method, however, the same impairment in two individuals would be compensated differently, depending upon the calculated "economic value" of the individual. This does not hold true in our compensation laws; there may be some variation in monetary award for a specified impairment, but this is dependent upon present income and has fixed maximum and minimum limits. Holt's method has been used chiefly in revision of United States pensions.

For purposes of standardization the Committee on Statistics and Compensation Insurance Costs of the International Association of Industrial Accident Boards and Commissions has adopted the following table showing extent of disability:

1. Fatal.
2. Permanent total disability—dismemberment.
3. Permanent total disability—other.
4. Permanent partial disability—dismemberment.
5. Permanent partial disability—total loss of use.
6. Permanent partial disability—impairment of use.
7. Permanent partial disability—disfigurement.
8. Permanent partial disability—other.
9. Temporary total disability.
10. Temporary partial disability.

A glance at this schedule will show that it is in groups 6 and 8 that physicians are most frequently called upon for estimation of the amount of disability.

Indiana Compensation Law. The Indiana law (as are practically all state compensation laws) is specific in fatal accidents, permanent total disabilities, and permanent partial disabilities from amputations, loss of vision, hearing, etc. As to partial impairment, the clause is as follows: "In all other cases of permanent partial impairment, compensation (shall be paid) proportionate to the *degree* of such permanent partial impairment, in the discretion of the Industrial Board, not exceeding five hundred weeks." It is in this group that the physician's testimony is depended upon for equitable determination of the amount of permanent damage.

It would be impossible in the scope of this paper to discuss methods of measuring impairment of all parts of the body—for example, the percentage loss of hearing and vision, which are special problems of the aurist and oculist; or of damage to the brain or nervous system, or of a variety of medical diseases which may or may not follow upon, or be aggravated by, recent accidental injuries. The great majority of accidents requiring estimation are those involving the upper and lower extremities. It is with this aspect of the question that this paper is chiefly concerned.

Moorhead was one of the first in this country to attempt to rate impairments mathematically. He adopted this method in order to rate his results in fracture work. Briefly, he advocates that instead of using such terms as good, fair, poor and bad, which depends on the personal equation of the examiner, there be substituted a "relatively exact standard on which mathematically to measure the final outcome of a given injury." His plan is based on the three elements of function, union and contour, with the following ascribed relative values:

Function—60% (ability to perform).
Union—20% (state of repair).
Contour—20% (external appearance).

This formula he has found particularly valuable for comparison of pre- and post-treatment conditions. (Function is given a value three times that of union or contour, which is as it should be, as restoration of function is the main object of treatment. In the minds of the laity, however, union and contour often loom as the most important factors, and are frequently the basis of malpractice suits—a false interpretation of end results.) Moorhead does not go into detail as to his *method* of estimating function of any part.

Henry H. Kessler, medical director of the New Jersey Rehabilitation Commission, has recently done a great deal toward simplifying this subject and has advocated quite definite methods by which the various factors causing disability may be measured. He advocates that *function* represents the true measure of ability or disability. Two factors are recognized as true criteria in estimating disability, namely:

1. The use of function as the true measure of disability.
2. The application of this measure when the loss of function is permanent or fixed.

The application of this last factor implies that all medical and surgical measures have been used and a sufficient time has elapsed since the injury to produce a maximum therapeutic result.

To obtain uniform results and to prevent malingering, only *objective* findings must be used in any evaluation of function; furthermore, we cannot be guided by a commonly accepted view that function is synonymous with *movement*. When physiological function of an extremity is analyzed it will be found that it is composed of three factors

1. Movement of joints.
2. Power of muscles.
3. Coordination and control from the brain through the peripheral nerves.

It is the combination and correlation of these factors which result in the physiological function of prehension in the upper extremity and in weight bearing and locomotion in the lower extremity. As an example of the application of this method, let us consider the evaluation of these factors in the upper extremity. It may be considered as being composed of two main parts—the hand and fingers (the tool) and the remainder of the forearm and arm, which may be considered as the compound lever. These two units are inseparable and one is more or less useless without the other. To measure loss of function in the arm radicle, we must consider each of the factors of motion, strength and coordination separately.

Motion of the joints is measured by comparing the affected joint with the normal joint of the opposite side, and may be done roughly by manipulation and inspection or by the aid of arthrometers. In either method, only *active* motion should be measured and the limb should be in that position in which there is maximum range of motion. In the upper extremity the shoulder, elbow and wrist joints are measured. The various movements of each joint (flexion, extension, etc.) are measured for loss of motion. Only one movement is to be used as an index to the motion of the whole joint and that is the one with maximum loss. Thus, if measurement at the shoulder joint shows 50 percent loss of abduction and 30 percent loss of rotation, the total loss of motion for this joint is 50 percent and *not* 50 percent plus 30 percent. If motion at the elbow and wrist joints are normal, we then have to calculate the loss of motion at the shoulder joint in terms of loss of motion of the entire arm. For this purpose an equal value is placed on each of the three joints. In the above example a 50 percent loss of abduction at the shoulder joint represents a 17 percent loss of the entire arm (50 x 33 1/3 percent). Each of the three joints is measured for loss of motion and the total loss of motion calculated. (In the elbow, pronation and supination are not considered as a separate joint function, but are ascribed to the elbow joint proper.)

Considering next muscular strength, this function may be measured by one of two methods, the ergographic and the dynamometric. In the former the part performs a piece of work (*e. g.*, rotation of a wheel), the work done being measured by a mechanical formula (FxD). This method is not practical because it involves the factor of fatigue, for which we have no adequate measure. With the dynamometric method, various types of instruments have been used. Grip dynamometers have been used widely, but they measure only the grip of the hand. Kessler has adopted the Martin Spring Balance as being the most reliable and best adapted for all muscle groups. In this test a positive effort is not made by the patient, but the maximal resistance of the patient is overcome by the individual doing the testing. Martin and Lovett used the spring balance quite extensively in children following the epidemic of poliomyelitis in Vermont and have published several articles describing the technique of its application in investigations of muscular strength in relation to disease and in individual industrial efficiency.

In the upper extremity the following muscles are tested*:

Pectorals	2.35%
Ant. deltoids	2.10
Post. deltoids	1.40
Latissimus dorsi	1.70
Extensors of forearm	1.50
Flexors of forearm	2.25
Extensors of wrist	1.05
Flexors of wrist	1.35
Extensors of fingers	0.65
Flexors of fingers	2.95
Abductor of thumb	1.30

*Relative strengths computed by Martin.

The corresponding muscle groups of the opposite side are used as normal for comparison. The total amount in points for the above group is compared with the total for the opposite side.

For example:

Total strength of affected side ..... 285 lbs.
Total strength of normal side ..... 320 lbs.
Loss of strength .... 35 lbs. or 11% of normal

(Martin found the difference in strength of the two sides when normal to be so insignificant as to attach no importance to it.)

The last functional factor to be measured is coordination. The ability to complete an act efficiently depends not only on muscular strength, but also on its ability to respond to the nerve stimulus which directs it into its proper channel of action. Coordination involves the factors of dexterity and speed. Various types of coordination tests have been devised by psychologists; for practical purposes Kessler finds the peg-hole test simple and adequate. This consists of a board with 32 holes, each one-fourth inch in diameter, into which are placed the pegs, which are one inch long and cut to fit the holes exactly. The pegs are held between the thumb and index finger and each hand tested separately.

For example:

Normal hand places, 28 pegs
Affected hand places, 26 pegs
2 pegs—7% reduction

To recapitulate:

Loss of motion 17%
Loss of strength 11
Loss of coordination 7
Total loss of function in forearm 17

Equal values are ascribed to the three factors (M, S and C), and the total loss of function is equal to the maximum loss of any of its component factors.

This completes the disability rating for the arm radicle. Proceeding to the hand radicle, we find three essential units of function to be measured. These are:

1. Grasping power for small objects between the folds of the fingers.
2. Grasping power for large objects between the fingers and the palm of the hand, and
3. Opposition between the thumb and tips of the fingers.

Kessler places an arbitrary value of 40 percent on thumb opposition because it can substitute for the small object grasp of the fingers; the two other functions are each given a value of 30 percent. The same method can be applied to each individual finger, the amount of disability depending upon the loss in these three functions. If there is no tissue loss or sensory disturbance the loss of *motion* may be considered as equivalent to the loss of function for that finger.

If it is found that there is loss of function in both the arm and hand radicles, the disability of the entire extremity will depend on the maximum disability of either radicle. Thus:

Disability of arm radicle 25%
Disability of hand radicle 40

The entire extremity is disabled 40 percent, the maximum of the two disabilities. (The disability of the entire extremity is as great as the disability of its most affected part.)

Disability in the lower extremity is measured in the same manner, with weight-bearing assuming the relation and importance that prehension occupies in the upper extremity.

Conclusions:

1. Any estimation of permanent disability presupposes the establishment of a fixed condition of the part; it implies that all measures —medical, surgical, physical therapy, and occupational therapy—have been given a complete trial before establishing this fixed condition.
2. It is the group of permanent partial disabilities in which there is usually found wide variations in estimates and it is in this group that uniform methods are desirable.
3. The method described seems rational, is based on physicological principles, offers simplicity and uniformity and a fair degree of accuracy.
4. A method of estimation which eliminates the personal equation as much as possible is desirable, not only for the purpose of fulfilling the law, but also for the detection of malingering, for prevention of the "compensation complex," and to enable the medical examiner to become a just arbiter between employer and employee.

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INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar March 27, 1931)

MEDICAL CASE REPORT THROMBO-PHLEBITIS OF VEINS OF NECK, COMPLICATING ACUTE SORE THROAT

RUSSELL A. SAGE, M.D.

A white female, age thirty-four, was admitted to the hospital on March 2nd complaining of sore throat, swelling and tenderness on each side of the neck, discharge of pus in mouth, high temperature, chills, pains in the joints and severe headaches.

Her present illness began a year ago with an attack of quinsy on the right side, which opened spontaneously after a week. The patient said this abscess would drain for a while and then close, and that this had been occurring frequently during the past year. Twelve days prior to admission she had developed soreness in both sides of her neck and a severe sore throat. She had had tonsillitis

frequently until she was eighteen when she had a tonsillectomy, with relief for several years. Her other past history was essentially negative.

On admission it was difficult to examine her throat because of her inability to open her mouth very wide. The whole throat was red and there was considerable swollen tonsillar tissue on each side but no evidence of quinsy and no pus was observed. There was no evidence of pharyngeal abscess. There was considerable swelling of each side of the neck with tenderness over the sternomastoid muscles and some tenderness over the mastoid process. The parotid gland was enlarged, firm and tender. The deep cervical glands were enlarged and firm and there was a cord-like swelling over the course of the external jugular vein. The facial vein appeared to be collapsed. The ears were negative and beyond some swelling of the inferior turbinates there were no nasal findings. Physical examination was otherwise negative. Temperature was 101.5 degrees. Blood pressure 110/70. Urine showed a two-plus albumin. R.B.C. 4,100,000. W.B.C. was 20,000. Polynu. 78 percent. P.S.P. 45 percent.

She was seen by several staff men without any definite conclusion being reached. During the next few days her temperature was of the septic type, at one time reaching 106.8 degrees.

Treatment consisted of bed rest, forcing of fluids; ice packs to the neck and large doses of sodium salicylate and soda. On March 7th areas of fluctuation were found on each side of the neck and these were opened under local anesthesia. The external jugular veins were found to be filled with a thick, gelatinous, greenish yellow pus which showed streptococci on smears but could not be cultured. Three days later more pus was evacuated from below the deep fascia on each side of the neck at the angle of the mandible. Hot fomentations were substituted for the ice bags, and for a short time this treatment gave the patient some relief.

X-ray of the mastoids showed some evidence of old chronic infection but no recent involvement. No pus was obtained when paracentesis of the ear drums was done. Blood culture taken the day after admission, following a chill, was negative. Repeated blood counts were made and the W.B.C. remained between 15,000 and 20,000.

Ophthalmoscopic examination showed evidence of a recent hemorrhage in the right eye, and some optic neuritis.

The patient's course was progressively downward and she died on March 14th.

At autopsy a fluctuant swelling was found in the right temporal muscle and when an incision was made about five cubic centimeters of thick pus escaped. The lumen of several blood vessels could be seen with pus escaping from their severed ends. There was a moderate vascular congestion of the small vessels of the meninges and the pia arachnoid was considerably thickened and œdematous. The sinuses and the dura mater were normal with the exception of the right lateral sinus, which was occluded with a firm clot. In the anterior portion of this thrombus there was a large quantity of thick yellow pus. The cavernous was filled with pus, and also the right internal carotid artery. The ophthalmic veins were filled with thrombi in which suppuration was occurring. There was no infection in the cellular tissue of the orbits. There was no evidence of recent infection in the mastoids. The sphenoidal sinus was filled with thick mucoid material, but there was no evidence of acute pyogenic infection. The ethmoid sinuses were similar in appearance. The maxillary antra were opened and the right one found to contain a considerable quantity of mucoid material which was slightly greenish in color.

On the right side of the neck the internal jugular vein was found to be thrombosed throughout its upper two-thirds. Its wall was so thickened that for some time it was thought to be the carotid artery; however, on further dissection the common carotid was found, and upon opening the vessel it was found to be patent throughout as were also the external and internal carotids.

On the left side the internal jugular was thrombosed throughout its upper three-fourths and when opened the clot was seen to be infected and thick greenish yellow pus escaped from the lumen of the vessel.

In the lower lobe of the right lung a few small pulmonary abscesses were found.

This is a case of suppurative thrombo-phlebitis of the veins of the neck, complicating an acute sore throat.

MEDICAL CASE REPORT

E. G. Billings, M.D.

The case that I am presenting for the department of medicine is not one to illustrate a disease syndrome, but one to show the result of therapy. The clinical picture of this man prior to treatment was that of the migraine group. The case illustrates one of a small group of cases suffering with terrific cephalgia and epileptiform seizures which tend to improve following the extraction of unerupted or impacted third molar teeth. I do not wish to imply that unerupted and impacted molar teeth are more than a stimulus tending to precipitate migrainous and epileptiform attacks in a few individuals who have perhaps an inherent or an acquired tendency toward the same.

The case is that of C. R. S., age forty-two, twice married, the father of two sons by the first marriage, and a farmer by occupation. He entered the Robert Long Hospital on January 20, 1931. His history was to the effect that since 1921 (ten years ago) he has had attacks of terrific headache, preceded by an aura of apprehension and weakness; and succeeded by unconsciousness and clonic jerkings of the legs and arms and later by insomnia. He stated that the cephalgia was first

generalized, tended to increase in severity, and finally localized over one of either eye (usually the right). These attacks had, up to operation, been increasing in occurrence. He stated that before his admission to the hospital he was having as many as five in thirty-six hours, requiring as much as two and one-half grains of morphine plus hyoscine to relieve the suffering. He had one such an attack lasting for three days during his hospitalization—this one requiring an HMC No. 1 several times. The significant points in his past history were: good health until 1921, a left radical antrum operation in 1925, an antral window made into the right maxiliary sinus three years ago, sphenoid and ethmoid sinuses operated and drained two to three years ago, and many spinal drainages during the past five years; all of which produced not even a transitory relief from pain.

General physical examination showed an impaction of both upper third molar teeth and infection of both upper second molars. There was an absence of the left knee jerk and a diminution of the right. There were no pathological reflexia. There were a few floating vitreous opacities in each eye. The fundi occuli were normal. Clinically and from an x-ray standpoint no paranasal sinus infection could be found.

The laboratory findings, including spinal fluid examination and serology, blood chemistry and serology and later a provocative Wassermann, and extensive x-ray examinations, were all negative.

Varlous therapies ranging from physical therapy to massive doses of narcotic were tried but to no avail. On January 28, 1931, under local anesthesia, the right upper second and third molar teeth were extracted. The patient stated that after that, in spite of the post-operative pain, he felt much relieved—better than he had for ten years. Following this lead, the left second and third upper molars were extracted on February 14, 1931. After this second extraction the patient expressed his hearty thanks for having been completely relieved of his headache—the first time in ten years.

He was discharged on February 16, 1931, and has visited our out-patient department several times since, each time stating that he feels fine, is able to carry on his work, and "enjoy life as I did prior to 1921."

In summary, first, this case represents one of a small group of individuals suffering with terrific cephalgia and even epileptiform seizures and unconsciousness who can be relieved by the removal of impacted third molar teeth. Secondly, by no means are anywhere near all individuals having so-called "migraine" suffering because of the possession of third molar teeth; however, this possibility must be borne in mind constantly when studying such a group in order to relieve the few by such a simple therapy.

SURGICAL CASE

Frank B. Ramsey, M.D.

Man, thirty-two years of age. His health until one year ago was good. His mother is living and well at seventy-two; father is dead, cause of death unknown. The patient stated in his history, which is rather unreliable, that about five years ago he noticed a small growth on his leg near the tibia. He called it a seed-wart, very dark in color. At that time it was treated by tying a thread around it, and the growth dropped off. A year or two later he noticed a recurrence of the growth, and at that time it was treated by some type of cautery, but without complete removal. Following that, about a year ago (in May, 1930), he first noticed the appearance of a small subcutaneous nodule in the right inguinal region. This was very hard and firm and became attached to the skin at the lower edge and progressively enlarged. At some time during the past year a doctor was called to see him who opened the lump under the belief that it contained pus, but no pus was found. Shortly after that time the lesion became necrotic and sloughed.

His general physical examination shows profound cachexia and weakness, and the presence over his body of several other subcutaneous nodules. One of these nodules appeared on the sternum, one on the left side of the chest, and one on the left leg. The nodules on the left side of the chest was biopsied under local anesthesia.

This lesion is probably what is ordinarily called melanotic sarcoma, which usually arises from a deeply pigmented mole on the skin. Some pathologists believe this lesion is one variety of carcinoma, and since it moves by the lymphatics and presents certain characteristics of carcinoma should be called melanotic carcinoma.

This case illustrates the futility of treating these small skin lesions by half-way measures, and shows that if anything is done for them it should be done in a thorough manner. Any removal should be done with wide dissection of the skin on all sides and cauterization of the base of the lesion.

So far as treatment is concerned, there is probably nothing that will do him any good now.

PRESENTATION OF SURGICAL CASE

C. A. Burroughs, M.D.

This girl on November 19th was brought to the Methodist Hospital complaining of vomiting, paralysis of the right side, and convulsive seizures. The only possible thing in the previous history is a fall at four years of age, at which time she bumped her head. This was not severe and there were no symptoms. Last March she received a bump anterior to and above the left ear. Also in March she had a convulsive seizure with twitching

of the muscles on the right side, another attack in June and another in September. Immediately prior to her admission to the hospital she had an attack of vomiting which was spontaneous and was not preceded by nausea; she also had profuse perspiration and involuntary voiding. History of infancy and childhood was negative; no acute infections except measles. She developed normally in mentality and was counted a very good student. A tentative diagnosis of brain tumor was made with beginning intracranial pressure.

On November 20th she became comatose, with labored respiration and slow pulse. At this time a decompression was performed on the left side in the temporal area, the needle passing backward toward the suspected tumor. It met resistance and a large amount of venous blood was obtained. However, there was no bleeding when the needle was withdrawn. The dura was opened widely and the muscles closed over it.

On November 27th she was brought to the Riley Hospital. The wound was infected badly, but this cleared up in ten days. Examination showed a herniation of the brain through the decompression wound about the size of a grapefruit. She had internal strabismus, the tongue protruded to the left, and the right arm and leg showed faccid paralysis; absence of reflexes on that side, both superficial and deep; positive Babinski and positive Kernig; ankle and patellar clonus. She was not orientated, and did not know her name. X-ray in the next few days showed a deeping of the sella turcica and a thinning of the dorsum, but not enough to account for the pathology in the clinical picture. There was also a suggestion of dilatation of the veins on the left side and obstruction of the return circulation, but that was not marked enough to bring about a picture like this. Further x-rays showed a suspicion of new growth somewhere at the base of the brain.

In December she received three x-ray treatments, and this was repeated in one month. The herniation was reduced in size, but she still has paralytic symptoms. She still has ankle-clonus, and a spastic paralysis of the right arm and leg. We intend to give more x-ray therapy and make a brace for the spastic leg and a splint for the arm. Her mental condition is clearing up and she seems to be well orientated. She does exceptionally good work in occupational therapy—such as rug and basket weaving.

ORTHOPEDIC CASES

GEORGE GARCEAU, M.D.

I present four cases of malformation of the feet. Two of them are paralytic in origin, the deformity following poliomyelitis. One boy has congenital talipes equino-varus. One child has acquired talipes equinus of the left foot following osteomyelitis of the fibula and tibia.

I will take the paralytic cases first. You can see readily this boy has paralytic talipes calcaneo-varus. That deformity is caused by paralysis of the gastrocnemius and soleus muscles which allows the heel to fall down, and the degree of deformity depends on the muscle disbalance present. If there is an intact anterior tibial you will have a cavus, as this boy has. Where the heel comes down there is a high arch. The foot is balanced fairly on the lateral side, and the fibula and tibia are intact. He walks fairly well, but has a painful foot and cannot walk any distance without pain in his foot, due to improper weight bearing. The gastrocnemius in this case is not entirely paralyzed. When he walks he comes down on the heel and the toes do not touch the floor. The anterior group of muscles is good and strong. The perineal and posterior tibial muscles are good. The motion is in the astragalo-tibial joint. In a case where the gastrocnemius and soleus are intact you have the instability of the foot in the subastragaloid joint. Subastragaloid arthrodesis of calcaneous feet is not satisfactory. This type of case demands an astragalectomy, a Whitman's operation. The astragalus is removed, the foot displaced posteriorly on the lower end of the tibia, after a seat has been prepared to receive the lower end of the tibia, then the foot is put in a case with slight equinus and possibly very slight valgus. In three or four months you have a very stable foot with fifteen to twenty-five degrees anterior-posterior motion but very little lateral instability of the foot and usually painless.

This girl shows practically the same condition, but she has had an arthrodesis. She walks very well also, but not as well as she might. Arthrodesis has done her some good. It was done in 1928. She bears all the weight on the os calcis and very little on the front of the foot. The reason is that she has too much motion in the astragalo-tibial joint. Had this child had an astragalectomy she would have had a much better foot, a good weight-bearing foot with motion at the right place in walking. Operation on the joints of these feet depends on the deformity and on the muscular disbalance.

This boy twelve years old has a practically untreated talipes equino-varus, a congenital club-foot. Of course, that is a tremendous handicap to a child, although you would not believe it to watch him. Notice the splint on his leg. The pathology in club-foot is not only in the foot but in the leg, from the knee down. These children with this deformity are very happy and do not think much about it. But when they grow up they have painful feet and cannot bear weight very well, cannot walk without pain. You can see what Nature has done —thrown out a big callus or pad and the weight is borne on that. There is nothing peculiar about this case—you see them every day—but it shows an untreated club-foot. Had this child been taken in time, most of the deformity, if not all, could have been corrected successfully without surgery,

or at least with very little surgery. It takes a long time to correct this deformity. If you could get the children very young, by gradual correction and maintenance of correction with apparatus such as plaster splints, etc., most of them could be corrected and without extensive surgery. Of course this child will need extensive surgery. The plan is first to place the foot in a circular cast in order to loosen up the muscles about the metatarsal joints and stretch the tendons. After we have obtained that correction it will be necessary to do a stabilization operation in order to prevent recurrence of the deformity and also completely to correct the deformity. The operation probably will be some type of arthrodesis in the subastragaloid joint and mid-tarsal joints. It is possible we will have to do an osteotomy of the neck of the astragalus. The astragalo-scaphoid joint is dislocated completely. I make a plea for early treatment of club-foot.

This boy two years ago had an injury to his leg followed by apparent osteomyelitis of the fibula and tibia. There are scars where drainage was instituted. Now he has this deformity. There is no shortening of the leg, at least not enough to be of any consequence. This is an acquired deformity, and I believe it could have been prevented at the time of the acute disease had this child been placed in a posterior splint, or some apparatus to prevent equinus, and it would not be necessary now to do an operation. The anterior group of muscles of the leg are markedly weakened and have practically no strength at the present time; he can barely move the foot. But the extensor hallucis longus and the anterior tibial at least are intact, but have no strength. The reason is that they have been stretched so long. The plan is very simple—to correct the equinus deformity by a lengthening of the Achilles tendon and manipulation, then the application of a plaster cast for a few weeks, followed by a short ankle brace. He should make a complete recovery as far as the deformity is concerned.

OBSTETRICAL CASE

L. J. GARRISON, M.D.

This case is being presented as one of pregnancy of four or five months complicated by the presence of uterine fibroids. The patient is twenty-nine years of age. There is nothing unusual about her past history. She called her family doctor because of a protuberance in the abdomen near the umbilicus. She had some pain, not a great deal, and on examination by her physician there seemed to be a question in his mind as to what this mass could be pushing out near the umbilicus. He first thought it might be an umbilical hernia and tried to reduce it. The manipulation produced considerable vomiting. The fetal parts seemed quite superficial, leading him to think he might be dealing with an extra-uterine pregnancy. He sent the patient to the Coleman Hospital.

On examination it was found that she was apparently not very ill. There was no evidence of loss of blood, her temperature was normal and she was not having much pain. The mass presenting near the umbilicus was questionable. It seemed reasonable that it might be bowel and another attempt was made to reduce it, without success. The fetal parts were quite superficial, and it was thought the fetus might be outside the uterus. X-ray plates were taken showing the fetus to be in a breech presentation.

The patient had menstruated normally until last October. There has been no bleeding from the vagina since that time. One would expect some vaginal bleeding in a case of extra-uterine pregnancy.

With more careful examination it did not seem difficult to rule out an umbilical hernia. Obstetrical and gynecological consultants are agreed that the mass is a fibroid of the uterus. It is believed that its appearance depended upon the uterus rising to a height at which separation of the recti muscles permitted it to be noticed. There are other small fibroid masses felt both by abdominal palpation and vaginal examination. Since the extent of the fibroid is not known, we do not know whether or not this patient will deliver normally. She will be discharged from the hospital but kept under close observation. When at term a trial labor will be given. If necessary, a Cæsarean section will be done.

TOXICOLOGY OF "JAKE PARALYSIS"

R. N. HARGER, M.D.

About a year ago there appeared in various sections of the United States a peculiar epidemic. The victims of this epidemic exhibited symptoms which did not coincide with any known malady. The epidemic was localized in certain areas of the country, being particularly widespread in two sections—one of them the section just south of us, Kentucky and Tennessee and southern Indiana and Ohio, and another section having its center in Oklahoma and the surrounding states of Kansas, Texas and Arkansas. This epidemic, if we can call it such, lasted about six weeks and then subsided as quickly as it began. Since that time there have been no new cases. The cases which did occur have improved somewhat, although many of them are still far from recovery. The fact that practically all of these individuals gave a history of having consumed an alcoholic beverage containing ginger made it pretty evident that this had something to do with it, so it is given the name of ginger paralysis, or "Jake" paralysis, because "Jake" was the common name used for this type of beverage. The number of cases involved in this epidemic has been estimated variously, but probably a conservative figure would be somewhere

around 10,000 or 12,000 cases in the United States.

I will pass over the symptoms rapidly. Ordinarily there were no particular symptoms at the time except what intoxication may have resulted from the alcohol, with sometimes a little gastro-intestinal upset. About two or three weeks later the individual began to exhibit cramps of the calves of the legs, pains in the forearm, and shortly observed that he was unable to move certain of the muscles of the lower extremities, the forearms and wrists. There was paralysis more or less complete of certain muscles of the extremities, more marked in the legs than the arms, and usually more marked in the extensors than in the flexors.

When this epidemic first appeared there were many speculations as to what could cause it and a lot of theories were put forward. One was that it was due to a bacterial agent, but that was pretty well ruled out because the families of these victims did not exhibit any symptoms. Then it was suggested that it might be due to poison in the beverage—to arsenic or lead. Lead poisoning is associated with wrist-drop and arsenic poisoning with peripheral paralysis, but analysis of this material showed neither arsenic nor lead. It was suggested it might be a common denaturing material in the alcohol, but analysis ruled this out. For several months there was a great deal of question as to what could be the cause of these cases. There were no cases in Marion county. In fact, few cases occurred in any of the large cities. The reason for this probably is that the thirsty souls in those places had access to other materials.

We were naturally interested in the solution of this problem, and the nearest place to Indianapolis where there were any number of these cases was in Johnson County, at Franklin. Here there were about two dozen cases which appeared about the same time, and all from the same source. Through the kindness of Doctor Wilson, of Franklin, we saw a number of these cases, and obtained from the man who sold the material his remaining supply. By the way, he was one of the most serious cases (and his name was Jake, too), and was very anxious to throw any light on the situation that might aid him. The material consisted of several two-ounce bottles filled with a light brown fluid and labeled "Fluid Extract of Ginger." It was called the "Queen City Brand" and was distributed from Cincinnati. On examining this material it was evident that it was not true fluid extract of ginger; it was much lighter. On tasting it was found to be much less hot and evidently contained much less ginger. We tested it for various obvious poisons but did not find any poison in this material. We then planned to fractionate the material to see if we could remove the substance which was responsible for its action, but there we were disappointed. In order to be sure what was a toxic fraction it would be necessary to have some animal which would respond something like human beings. We began with guinea pigs, but got no results. We gave the guinea pigs large doses, much larger proportionately than human beings. In fact, one guinea pig was made drunk every other day for eighteen days and at no time, except while he was intoxicated, did he show any paralysis. He finally did die, because he got his nose into the water trought when he was drunk and drowned. Doctor Forry did a postmortem on this guinea pig, but there was no demonstrable lesion. Next we tried dogs, with the same results, except that we did not have enough of this material to intoxicate the dogs, but we gave them much larger doses than human beings were reported to have taken. In neither of these animals were we able to produce paralysis. By that time we had used up about all our material, and decided that perhaps somebody else was the logical person to solve this problem. Later we found we were unfortunate in the animals we chose. Had we used rabbits we would have gotten positive results. Dogs are absolutely inert to this material by mouth.

The credit for the successful solution of this problem is due to a group of investigators in the government service, to Smith and Elvone, of the Hygienic Laboratory at Washington, with the cooperation of chemists from the prohibition division.[1] [2] They had the advantage of a large supply of this material with which to work. Their first hopeful solution came with rabbits. They found if they gave rabbits material which was known to produce paralysis in human beings, they got symptoms, not identical, but quite similar. These animals exhibited, after a period of several days to one week, fine tremors over the body with spastic rigidity which later developed a little like strychnine poisoning, except that there was a backward bowing of the body instead of forward. Later they developed flaccid paralysis of the limbs quite like human beings. It was found that a small dose would kill a rabbit, and that true fluid extract of ginger would not injure the rabbit; also that samples sold on the market that would not produce paralysis in human beings would not cause paralysis in rabbits. They also found two laboratory animals more suitable for these tests, chickens and calves. Calves showed a long latent period and after some days an inability to move the hind limbs. That gave them a method of testing out the active fraction of the material. They next distilled the material and found that the distillate was inactive, and the residue was active. About this time an observation was made by Hoyt,[3] another government chemist at New Orleans, that whereas he got no trace of phenol when he distilled the material directly, if he first subjected it to a preliminary treatment with alkali which would hydrolyze the esters, he got tests for phenol or rather related substance which he thought was cresol. He next tested the residue and found large quantities of phosphoric acid. Being familiar with the industrial situation he remembered that there is an ester of cresol united with phosphoric acid

which is used by the lacquer industry to prevent cracking of such paints as "Duco," etc., tricresol phosphate, and that gave a lead as to what this might be. They did animal experiments with this material, and these experiments have proved that this is the toxic substance.

They showed by their work that tricresyl phosphate is much more toxic than other related substances, and that this compound is far more toxic than one would expect from its chemical structure, because the natural inference is that when such a compound is taken into the body it would be hydrolized to the cresol and phosphoric acid.

They also used monkeys as experimental animals and found that the material has no effect on the monkey if given by mouth, except over a long period of time, but when given subcutaneously or intravenously it does have about the same effect that it has on human beings.

Using various laboratory animals they tried out three things: ordinary fluid extract of ginger, this so-called fluid extract of ginger which was known to produce paralysis in human beings, and pure tri-ortho-cresyl phosphate. They found that the animals behaved identically after being given the material which was known to produce paralysis in human beings, and the tri-cresyl phosphate. Furthermore, that from a quantitative standpoint, figuring from the amount of phosphoric acid present in ginger, of which there is none in true fluid extract of ginger, these two behaved practically identically regardless of the alcohol, ginger, etc., that they got typical paralysis of exactly the same kind from these compounds—from the "fluid extract" of ginger known to produce paralysis, and from this compound. Finally, they took a large quantity of this "ginger" and were able to isolate from the material a compound whose physical properties correspond almost exactly with that of the oil, tri-ortho-cresyl phosphate, which I have passed around here, and which was shown to have produced typical symptoms in animals identical with those produced by the so-called fluid extract of ginger which is known to produce paralysis in man.

Their conclusions have been confirmed by work at the University of Oklahoma[3] and chemical studies in our laboratory have shown the presence of this cresyl phosphate in samples of "Fluidextract of Ginger" sold in Franklin, Indiana, and also samples sold in Marion, Indiana, both of which produced paralysis in man.

The final question you would like to have answered is how the material got in there. That is not answerable entirely, but the solution seems to be something like this: For generations, in places where they have prohibition, some people have insisted upon consuming a material which has been popularly called "Jamaica ginger." Jamaica ginger is the common name for tincture of ginger. Tincture of ginger is made by taking one part of fluid extract of ginger to ten parts of alcohol, so the quantity of ginger is relatively small, and when the material was diluted with water has been considered by some people as a potable beverage. With the advent of national prohibition the selling of tincture of ginger by drug-stores was prohibited because it was believed that this could be used as a beverage. It was still permissible, however, to sell another preparation of ginger, the fluid extract. The fluid extract is practically ten times as strong of ginger as the tincture. Instead of one part of ginger to ten of alcohol, there is one part of ginger to one of alcohol. It was not illegal to sell that, the theory being that although it contained alcohol, it contained so much ginger that in order to dilute it to a point where a human being could drink it, the quantity of alcohol would be too small to have any "kick," so the fluid extract of ginger was sold legally, and I believe still is.

As a result there appeared on the market certain fluids labeled "Fluidextract of Ginger" which contained the same amount of alcohol but much less ginger than the real product.

One test for purity of fluid extract of ginger is the residue left after evaporation, about seven percent, and in order to make the correct amount of residue other substances were added—glycerine, castor oil, etc. Apparently someone (I am afraid it was a chemist) thought this cheap oil from the paint industry might make a good adulterant for his fluid extract of ginger. All of this material appears to have come from one source. This particular bottle bears a Cincinnati label, but that firm lasted only about three months; they were distributors for a New York house. The men who are responsible for this have been indicted, some are in prison, but so far they have not explained how the material got in there, although they probably had no idea of the ill effects this would produce.

I believe we can say that it has been proved that tri-ortho-cresyl-phosphate is the cause of this paralysis. It seems that the quantity of this oil necessary to produce paralysis in man is in the neighborhood of one to two grams, and the amount in this so-called "Fluidextract" of ginger is around two percent, so it is entirely possible for an individual to be paralyzed by a single two-ounce bottle of this material, which is the story in certain cases. The final conclusion is that Duco is an excellent material for use on automobiles, but probably not so good for use on human interiors.

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BED-TIME STORY—THE FORCEPS

E. O. ASHER, M.D.

This story will begin about the time that civilization emerged from the Dark Ages. It will concern the efforts of men to help women. It occurred

to me that if these people in labor had been men, they would have received more help than they did from men at the time. The thing that impressed me in browsing through some old text-books was this: The lying-in chamber in the age about 1500 consisted of the average bed in the average home of the time. The patient was attended by neighbor women. Occasionally the men took charge at this time, so we have female midwives and male midwives. The doctors did some obstetrics, of course. They were called in sometimes when a case was undelivered and there was trouble brewing. Therefore it became the duty of the doctor to try to do something, but what could the doctor do? He had his two hands; he had his ability to work; but all he could do at this period was a version, and versions were frequently done on undelivered cases. A version produced results because they could turn the baby around, get hold of its feet and thereby have a handle, and drag it out, unless the pelvis was so small that the head would not pass; then of course there was more trouble. A A Cæsarean section was occasionally resorted to. The mortality in Cæsarean section was so great that a remarkable thing in text-books written as late as 1850, a record of the names of women who recovered from Cæsarean section, is printed rather than the number of Cæsarean sections done. There is some confusion in the literature about what was called Cæsarean section, therefore much of the success that Cæsarean section sometimes obtained was really perhaps version or craniotomy and not a regular Cæsarean section.

The efforts to help mechanically consisted of the application of some sort of metal instrument inside the pelvis. What about the mechanics of labor? The text-books I have found say nothing about the mechanics of labor at all until we get down to the period about 1840. Smellie, in his text-book printed about 1766, mentions the mechanics but does not go into it in detail. Therefore there were many instruments devised to insert into the pelvis which would do something. One was called a fillet. It consisted of a leather tube about two feet long both ends of which came back to a handle. Inside this leather tube was a whale bone or wire, usually a whale bone, that made it a little stiffer so it could be pushed into the pelvis and looped over the baby's head. But this could not be done with the head low in the pelvis, therefore the head was pushed out and an effort made to insert the fillet over the baby's head; then the whale bone was slipped out, leaving a noose around the baby's neck with a man at the other end to pull. Whoever won got a prize. The baby's head was folded up and sometimes they pulled the neck in two. Then there were two bodies in the pelvis instead of one, and that required further instruments. This instrument appears in the text-books throughout this period and in the writings of men even to the time of the Civil War as the recommended instrument. Of course in writing a text-book it must contain material that will interest the men, and perhaps if the fillet had been left out the book would not have sold so well.

Following this and along with it there was further effort made to get some sort of instrument that would do some good, therefore it is found that in about 1580 Chamberlen invented something in the form of a hand—an instrument made of iron or silver with one blade to insert into the pelvis to go above the baby's head and pull down. It could be inserted at the side of the pelvis and curved around the baby's head, then in order to pull they tried to insert a hand at the other side, but there was not room. Therefore as a rule the only admonition of the teacher about the vectus was that the one blade of the instrument should be inserted as far as they could push it and then used, instead of a pull, as a pry. What would they pry against? The baby's head and the mother's soft parts along the handle of the instrument, the doctor at the other end making a perfect lever, and doing a lot of damage with the instrument. That was kept with great secrecy, but yet seemed to do a great deal of good. Efforts were made to improve this, for they needed another blade, and finally a forceps was invented which had two blades, but unfortunately it was made like a pair of pliers and came together in the middle at a joint, and thus could not be inserted past the baby's head because it was clasped together.

Some of the older writers describe things like this: Some forceps evidently had on the end sharp spikes which would pass the baby's head and then produce a claw-like motion by which they got hold of the baby. Other forceps had teeth on the inside of the blade which would not allow the baby to slip. These were not very successful, but this brutal method was the recognized method of delivery of the time. Now what happens? When such things occur the babies are born dead and the mothers brutally lacerated. There is a lot of objection to the work of that particular doctor, therefore his reputation suffers, so it became the custom of doctors who had these cases to work on them under the greatest secrecy. Thus they worked in this manner: The patient was covered with bed clothing and the doctor went under the bed clothing to do the work. If he wanted more room he pinned a blanket or sheet over his shoulders and sat by the bed, making a canopy over the whole. No one saw where he worked. That sounds queer, but that was the doctor's protection. The modesty of the patient required that, and the doctor required protection; therefore he worked without anyone seeing what he used. There is another reason for that. Each doctor who worked with an instrument or had a method carried it around as a secret of his own. In about 1580 a man in France, Chamberlen, invented a forcep which is really the beginning of our present obstetrical forceps. It was the Chamberlen's secret. One blade was inserted, then the other, and they could be brought together at the handle. He really had

found something, but difficulties arose between him and the French government, so he fled to England. Chamberlen kept this a secret and handed it out to members of his own family and they used these forceps. It is hard to imagine, but for almost two hundred years this secret was kept in that family. Efforts were made on every hand to secure these forceps. Men made imitations, but they did not have the secret until after the death of the older Chamberlen, when one of the family went to Paris about 1670 and there laid before the French obstetricians his problem—he desired to sell this secret. The French obstetricians said, "You demonstrate that you are able to deliver a baby and we will buy your secret." A few years ago in our own City Hospital there was an invitation extended to an eastern anæsthetist to come here and demonstrate a better method of ether anæsthesia. The internes at that time conceived the idea that instead of giving the patients a pre-anæsthetic narcotic and atropin, they would change the order and give them a big shot of strychnine, so of course the anæsthetist was disappointed in his results. Something of that kind may have crept into the situation there in Paris because they presented one of the hardest obstetrical cases possible, a case of extremely contracted pelvis, and he was not able to deliver the woman. She died in twenty-four hours, whereupon he packed his grip and went back to England, where the secret remained. Then this man conceived the idea that he would sell it to the Dutch, so he took it to Holland and sold it to the Dutch obstetricians. He sold it well. Just what he sold is not known, but we find they used a single-blade instrument, and it was not for years that they found they had in reality bought a vectus, the ordinary instrument that did not even have a window in it. They had received a lot of hokum, but had done a good job in using it. In fact, the authorities of Amsterdam passed a resolution that all people practicing obstetrics should be versed in the use of it. They kept the secret of these forceps for years, until finally all the Chamberlens died, thinking they had kept their secret in such a way that nobody would ever know what they had. But about 1732, after using this instrument for a number of years, Chapman of England described his instrument, which took the place of the forceps that Chamberlen had used for so long. How did the Chamberlen instrument come to light? The house in which they lived in England, the last of the Chamberlens, passed out of their hands as a family, and a good many years after, about 1815, someone tore into a certain little secret closet over an entrance and there discovered a lot of old trunks and letters. Among the stuff were four models of obstetrical instruments which began with the vectus and went to forceps with two blades—the secret that the Chamberlens had kept so long.

We now come down to the period before the Civil War, beginning about 1840 or 1850. In Ramsbotham's text-book there is a description of the equipment that was thought to be all the equipment necessary for attendance on an obstetrical case—a lancet and a female catheter. If anything else is needed the man could go to his office and get the proper equipment in any emergency that may arise. The lancet is described as an instrument consisting of a handle with a detachable blade. The female catheter is short, and there is a flare at the outer end which prevents it slipping out of the operator's hand into the bladder and thus saves his losing at least half of his equipment.

The recognized application of forceps was this: The doctor should enter the lying-in chamber with all gravity. He should approach the patient and cheer her—just as we do today. He should approach the bedside, cover himself with the covers, and proceed, without anyone knowing what he is doing, to get out his forceps. He was supposed to carry them in his waistcoat—and that is where I carry mine tonight. I hold in my hand the forceps of 1850—a short affair with wooden handles, put together with a lock. It has not much strength. The forceps for high work were twelve inches long and are described definitely in very minute detail. One thing I want to tell you about these is that the forceps were covered with a leather tube, which was done for two purposes. One was the protection of the baby's head and the mother's soft parts from injury. The other was to protect the physician himself, because they did not make a noise when he took them out of his pocket and slipped them under the feather bed. It is said there is always a neighbor in the lying-in chamber and he should conceal these from her. The forceps were inserted and from the descriptions I could find they were used the way we use them—a quarter turn right, a quarter turn left, as you are taught never to do now, I believe. After getting them in, getting the baby and getting them off, it is recommended that they should be wiped off under the covers and inserted in the pocket before anyone knows what is going on. From that great secrecy in the use of obstetrical forceps there arose a cry, "What is the matter with obstetrics?" Semmelweiss, and Oliver Wendell Holmes in this country, objected to the leather on the forceps. Semmelweiss was not listened to because he was on the Continent, and Oliver Wendell Holmes could not interest anyone because he came from the outpost of civilization in Boston. Therefore they were ridiculed. Wallace Johnston, earlier, makes this objection to the leather that, instead of wash leather, morocco should be used, because by wash leather gonorrhœa and syphilis might be conveyed from one patient to another. Therefore Ramsbotham in his book says if there is any possibility of wash leather or morocco being a source of conveying gonorrhœa or syphilis, then he would recommend that leather be taken from the forceps. If a doctor wanted to be particularly natty he might cover his forceps with a silver wash: thus if he wished to use precious metals

it would add to his dignity. Many of these forceps, down to the time of the Civil War, were covered with leather. They were never boiled, they were only wiped off. That was the picture before the era of antisepsis, before the period of the Civil War.

Through all of this, with all the brutality connected with the use of forceps, without proper mechanical aids, yet closing Ramsbotham's essays on the use of forceps, his admonitions are applicable today: "Cautiously and tenderly must this iron instrument be used. * * * Any forcible attempt to introduce, or violent effort, may bruise, may lacerate, may destroy." Bear that in mind today, and we will not be likely to fall into any grave error in this practice of ours. Let me close my story with this admonition: "Cautiously and tenderly must this iron instrument be used."

SPECIAL ARTICLES

STATE BOARD OF HEALTH

New Regulations Governing Dairy Products. The State Board of Health at a meeting April 1, 1931, adopted complete rules and regulations governing the production and distribution of dairy products in the state of Indiana and these rules and regulations are now in full force and effect throughout the state. The rules establish the bacteriological standard for milk as delivered to milk plants and to the consumer.

Complete requirements are set up for dairy barns, milk houses, equipment for handling, bottling and capping milk and for the operation and sanitation of pasteurization plants, for the protection of processes in the plant and for the cleanliness and safety of all milk-handling equipment.

Rules and regulations covering ice-cream plants and the materials used in making ice-cream are included. The rules also cover the sanitation and operation of cheese plants and, in fact, every type of building or plant in which dairy products are manufactured.

The rules and regulations have received the approval of the Dairy Husbandry Department of Purdue University and of the organized dairy industry of the state and will have the wholehearted support of the dairy industry. With this support and the cooperation of health officials, the dairy products of Indiana can be brought up to a high standard of quality and safety equal to the best to be found anywhere.

The State Board of Health is considering the advisability of including Vincent's angina (trenchmouth) in the list of diseases to be reported.

Reports from physicians and dentists indicate that this disease is rapidly increasing in prevalence in Indiana, but whether this is true can be determined only by securing complete reports of all cases.

Many physicians and dentists have expressed their belief that this disease should be made reportable. The State Board of Health will be glad to hear from physicians throughout the state as to their willingness to make reports directly to the State Board of Health, in order that more information may be had concerning the prevalence of this disease.

The United States Congress in February approved an appropriation of two million dollars to meet health needs in the drought areas of the various states, available for the fiscal years of 1931 and 1932, to be expended through the United States Public Health Service in cooperation with state health departments.

This Federal appropriation was made available for supplementing existing local health departments, for aiding in support of county health units in counties having no organization, for aiding in the support of county nurses and sanitary inspectors, for supplementing state boards of health and for aiding in supplying biological products.

Indiana has at least twenty-three counties that suffered because of the drought and in which Red Cross relief has been necessary. Efforts have been made by the State Board of Health to provide not only for emergency health needs but to prevent, as far as possible, adverse health conditions that may be anticipated in the drought sections of the state.

In addition to efforts toward safeguarding water supplies, protective immunization and health education, the State Department has secured the authorization of cooperative budgets under the Federal appropriation for the employment of a county public health nurse in Harrison county, Crawford county, Spencer county, Perry county, Sullivan county and for a school nurse in the incorporated town of Edinburg. Similar budgets are being considered in a number of other counties in the drought area.

The Sanitary Engineering Department of the State Board of Health has just completed a complete survey report of the Mississinewa river, covering the pollution of this stream by domestic sewage and industrial waste from the municipalities located on the water-shed of the stream.

Copies of this survey and report, with recommendations, have been forwarded to the officials of all cities and towns in the Mississinewa river water-shed area.

William F. King, M.D.,
Secretary.

DIPHTHERIA DEATHS FOR 1931 MARCH

Six diphtheria deaths in March exceeds by one the report of March of last year but still leaves us a margin of four under the first quarter of the

year last year. The physicians and the public of the state have another opportunity to establish a new low rate for the coming year and it is a most worth-while ambition. Striking is the fact that the southern portion of the state continues to show exceptionally low rates for this year so far. There was but one death in the southern half of the state. We are very glad to note that Lake county has had no deaths for the past month. It has been turning in an excessive number of deaths. Marion county, the largest county in the state, has not had a diphtheria death during the first quarter of the year. This is a very fine record indeed. Madison county with four deaths is easily the blackest in the state.

Below are the deaths by counties for the month and the year:

County	Total for 1931	March	County	Total for 1931	March
Allen	1	0	LaGrange	1	0
Bartholomew	1	0	Lake	5	0
Brown	1	0	Laporte	1	0
Carroll	1	0	Lawrence	2	1
Clark	1	0	Madison	4	2
Dearborn	2	0	Marshall	1	0
Delaware	1	1	Martin	1	0
Fayette	2	0	Montgomery	1	1
Gibson	1	0	Ripley	3	0
Green	1	0	Starke	1	0
Hamilton	1	1	Vanderburgh	1	0
Henry	1	0	Vigo	1	0
Howard	2	0			
Huntington	1	0		39	6

ABSTRACTS

HIGH BLOOD PRESSURE AND LONGEVITY

David Riesman, Philadelphia *(Journal A. M. A.,* April 4, 1931), cites five cases illustrating the compatibility of hypertension with longevity. One of the cases shows that even the arteriosclerotic form of hypertension is compatible with fairly long life. These cases, however, do not alter the fundamental fact that high blood pressure is not a bodily virtue. It is necessary to pick out the good cases from the bad so that one may be able to say to a given patient whether he has a chance to live long or whether an early death awaits him and that he had better make his will. In teaching, not enough attention has been paid to the art of prognosis. It is by the skill in this art that the public often judges the medical profession. Some of the means the physician has of foretelling the future of the hypertensive individual are indicated. One must always correlate the blood pressure with the age of the patient. Old persons bear high blood pressure better than younger ones. The height of the systolic pressure is not a reliable criterion unless it is excessively high. The patient's whole constitution must be weighed in the balance. More important than the systolic is the diastolic pressure. A high diastolic pressure is a bad prognostic sign. Heredity to a great extent determines longevity. Longevity as well as its opposite is largely an inherited trait. Not enough attention has been paid to this by geneticists, but it is as striking a familial trait as the color of the eyes, the conformation of the head, or any other physical feature. Therefore, in a hypertensive patient who exhibits nothing else of moment save the hypertension, the prognosis is favorably influenced if he comes of a long-lived family. Much can be learned about a patient's general prospects by studying his temper and the influences that play on it. Irascibility is not conducive to longevity in the face of hypertension. The more fully a physician explains these matters to his patients, the better will be their cooperation. From the physical standpoint the prognosis is influenced by the size of the heart, the state of the arteries, the kidney function, the eyegrounds and the coexistence of diabetes.

CAUSES OF FAILURE IN INJECTION TREATMENT OF VARICOSE VEINS

H. O. McPheeters, Charles E. Merkert and R. A. Lundblad, Minneapolis *(Journal A. M. A.,* April 4, 1931), believe that recurrences of varicose veins following the injection treatment are due to too great dilution of the sclerosing fluid or insufficient concentration of the fluid; failure to thrombose the great saphenous vein in the thigh completely even to the saphenofemoral opening, and normal recanalization, which is Nature's natural effort if the thrombosis is not firm and hard. To prevent recurrences, the operator should: 1. Locate the great saphenous trunk by the percussion method and sclerose it up to the saphenofemoral opening. 2. Empty the veins before injecting, to aid concentration. 3. Localize the sclerosing fluid by the use of tourniquets or the Mac occluders, so as to prevent excessive dilution. 4. Choose sclerosing solutions according to the type and size of veins; for the small, thin walled veins he should use milder solutions, such as invert sugar, for large saccular veins, dextrose with sodium chloride combinations and for the pick-ups, the quinine and urethane solutions. The authors have discarded the use of salicylates because of the severe pain and cramp. 5. Observe the patient till all the varicose veins are sclerosed satisfactorily. 6. Have the patient return in two months after discharge for check-up and at longer intervals after that. Precautions as to the injections are to: 1. Employ sterile technic. 2. Be sure that the injection is made within the lumen of the vein. 3. Stop the injection immediately when there is doubt as to whether or not the solution is going into the lumen. 4. If a perivascular injection has been made it is best to infiltrate the area of the injection with from 10 to 20 cc. of physiologic solution of sodium chloride. 5. Apply sponge pressure to prevent leakage when the needle is withdrawn or in case the vein wall has been punctured. 6. Observe the patient every other day for from six to ten days following the initial treatment and then in two months, and see the patient at two to four-month intervals after that. Yearly inspection is advisable.

INDISPENSABLE USES OF NARCOTICS

Horatio C. Wood, Jr., Philadelphia *(Journal A. M. A.,* April 4, 1931), prefaces his enumeration of the therapeutic uses of narcotic drugs with the statement that there are certain facts concerning opium or cocaine and their derivatives that should be borne in mind. First, they are valuable therapeutic agents; to banish them from the materia medica is to work an unjustifiable hardship on suffering humanity. Second, the habitual use of them is a real menace to the welfare of society, which should be combated with every weapon available. Third, the injudicious use of these substances as remedial agents has in many instances resulted in the formation of a habit. With a knowledge of these facts the conscientious physician will not hesitate to use them when necessity demands but, on the other hand, will try to avoid their employment whenever possible by the application of less dangerous measures.

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EDITORIALS

COMMONSENSE EATING

At the recent meeting of the American Chemical Society in Indianapolis the matter of food facts and fads was ably discussed by a national, and even international, authority on the subject. The meeting was open to the public and was intended to be of a non-technical nature. We were very interested to attend hoping that the latest word on this most vital subject would be something that would enable us better to understand the needs of the healthy man, woman and child. We were much pleased to hear the speaker give scientific foundation for what would seem to be just plain common sense in this matter of food. As a matter of fact our mothers and fathers knew most everything that was said except that they did not know all of the scientific details and hardly guessed the reasons why milk, vegetables, fruits, cereals, meat and eggs are such excellent foods. After the lecture we were able to sum up everything that was said in the following sentence, "Eat what you want of a wide variety of foods."

The speaker was inclined to think that there might be a possibility of not getting enough of three different food principles, to-wit: (1) calcium, (2) iodine, (3) vitamin D. Personally we cannot worry about even these. If one will eat milk, vegetables and fruit, he need hardly worry about the calcium. If in addition to this he gets into the sunlight when possible and takes cod liver oil when he needs it, vitamin D will certainly be supplied in abundance. Inasmuch as almost everyone is using iodized salt, there would not seem to much need to worry about iodine. Anyway we now have high technical authority for our belief that most of the fussing about food is just plain "hooey" and we are grateful indeed to the speaker who came out squarely on a platform of common sense that has been checked scientifically. We still believe that healthy people can eat what they have found to agree with them, and that folks that need a diet need a physician.

TOO MUCH HEALTH ADVICE

Our readers are probably familiar with the story of Mrs. Shelley's "Frankenstein"—a student who took pieces from cemeteries and dissecting rooms and fashioned from them a monster in the form of a man. Once the thing was made, however, it could not be controlled and turned upon its maker and destroyed him. The story strangely reminds us of the "Frankenstein monster" that is being created out of unrelated bits of over-emphasized health lore. Without doubt this present interest in health and hygiene is most commendable and promises much good. It is, however, being carried to extremes and is getting to be a burden. There is grave danger that the time soon will come when folks will revolt against the endless chores that are now imposed upon them in the name of health.

At the present rate it will not be long until folks will have to have a doctor's prescription before they can eat—maybe that is the reason why the druggists are all going into the sandwich business. The housewife is caught in a maze of vitamines, calories, carbohydrates and "acid-producing" foods, and does not know which way to turn. She is up against the problem of fattening the children, "slenderizing" herself, and satisfying the brute that comes home hungry and tired in the evening and it has just about got her down. Raising a baby in these days is a big undertaking, and one frequently hears a mother say that she does not see how she could possibly take care of two when one takes her whole time. As a result we are killing the goose that laid the golden eggs. In order to raise a few children well we are making such a fuss about it that most of the children are being raised by folks who have no standards whatever. If a mother might be expected to do all of the things that some of the health cranks are advocating she would need to have a Ph.D. degree from the university, but not many of the Ph.D.'s have children, so that suggestion doesn't seem to help a bit.

After all we doubt if there is anything so unhealthful, mentally as well as physically, as excessive attention to self. This health business is getting to be a "racket," and we are much in need of folks brave enough to break through a lot of these silly rules and insist that there are other things worth while, and that one can be healthy without making it his life's work. Common sense and a fair appreciation of what is really essential is about all that is necessary.

MOTHER'S DAY

It is sometimes rather hard to draw the line between sentiment and sentimentality. Certainly sentiment is a very pleasurable emotion which should not be too foreign to the hearts of men and women on the second Sunday in May, commonly known as Mother's Day. We do not wish, however, to listen again to the maudlin frenzy which we heard paraded in a public meeting a year ago. Far more important than the wearing of a carnation on Mother's Day is the task of

making motherhood safer and happier. Obviously as physicians we can do much to protect the mother and the child. Certainly the medical profession has no higher function. As members of society in general we can do much to make motherhood more popular and attractive.

Most of us will wear a white carnation on the tenth of May this year, and all of us would give years of our lives to turn it red for the day and visit the folks back in the old home. But that is out of the question. The problems which harassed our mothers are solved or will remain unsolved and may as well be forgotten. We will honor the gray-haired mother best by trying to serve the young struggling mother of today. Most wives and mothers are very human creatures who but a few years ago were carefree schoolgirls without a worry. They do not wish to be regarded as saints eternally surrounded by a mist of lavender, but wish nothing so much as to have the opportunity to serve their families better, and have a bit of fun themselves.

Attention has been called repeatedly to the fact that the United States has a surprisingly high maternal death rate. It is quite beyond belief that twenty-one other civilized countries have a lower rate than have we, but such apparently are the facts. Certain it is that our rate of 6.5 per 1,000 births is far above what it should be. Last year there were over 16,000 maternal deaths, of which number it is estimated that 10,000 were avoidable. Here is a major public health, medical, surgical, obstetrical and nursing problem which can be ignored only by those who are actuated by only the most selfish of motives. Recently much fuss has been made with regard to the matter of Uncle Sam continuing to function as a nurse and wet nurse for the mother and the child. We do not wish to enter the controversy at this time but merely intend to point out that the welfare of the medical profession and of every other profession and person is secondary to the real welfare of the child. If the mother and child can be better served under a paternalistic system then the medical profession must give way; if the mother and child are better served by a strictly private or local arrangement the highly organized lay department in Washington should be sunk without a trace. Obviously there is room for honest difference of opinion or possibly for compromise. However that may be, the welfare of the mother and the child is the big thing. Incidentally it would seem that neither the local arrangement nor the federal department as it has functioned during the past few years has been fully adequate else we would not have 10,000 needless maternal deaths a year.

The coming of Mother's Day challenges the medical profession and the laity to the unfinished task of keeping 10,000 carnations red instead of white each year. Until every man has given his best to this work, he is unworthy to do homage to Her who gave all and asked for nothing.

NEED OF COMPETENT CORONERS

The epidemic of complicated coroners' problems continues. In the past few months we have had at least a dozen perplexing murders, suicides and unexplained deaths. Many of these cases would tax the ingenuity of the most competent pathologist, and yet most of them have been handled first by the county coroner, who hardly can be expected to be an expert in pathology, toxicology and legal medicine. In not a few instances the coroner is not even a physician, being usually an undertaker when he is not licensed to practice medicine. After such a person has mulled over a body the evidence is so mussed up that not even the most expert can make sense of it. This is of course a most important matter. Furthermore, it adds little to the confidence of the public in the medical profession to have these silly arguments between physicians who are quite unqualified to express expert opinions on such matters.

The solution would seem to be to have a state coroner who is well trained in such matters and who holds his position by virtue of merit. He might then select half a dozen deputies in the various parts of the state who could act in the less important cases, and notify the chief when complications arise. Such deputies could also be selected on basis of merit and could be instructed by the state coroner as to details to be observed. Such a plan would cost the state less than having at least one coroner in every county; it would evidently give a better service because the men would be better trained; and it would be a much more creditable performance from the standpoint of the medical profession. Certainly the election of a coroner by the public is a most ineffective way of selecting a technical expert. It is well known that politics often has made the coroner's office a plum. The state, the victim's family, and the medical profession should be very anxious to see this office properly and decently handled.

MODERN MEDICINE

In every field of human endeavor there have been great advances in knowledge and efficiency, and medicine offers no exception. However, it is questionable if a majority of the physicians of today quite appreciate what it means to analyze and properly apply to the individual patient the advanced knowledge that we have acquired through investigation and practice. This fact has been emphasized rather fully by Dr. Charles P. Emerson, dean of the Indiana University School of Medicine, in discussing problems of medical education before the Council on Medical Education and Hospitals at its recent meeting in Chicago. The fact was pointed out that no two patients are alike, and the more the cases are studied the more individual differences are found. We are too prone to put our patients through a routine and come to conclusions without analyzing all of the facts, and

without due regard to the patient himself. Machine-like, the patient sometimes goes through the various departments of a clinic and the patient comes back to the one in charge with all the records presented to him, and the diagnosis and therapy written out. Doctor Emerson says that may be good business, but it is bad medicine. There is nothing final in a four-plus Wassermann reaction and there is nothing final, so far as the present case goes, in the roentgenogram of the chest. It is evidence which has to be evaluated in terms of the patient. It may mean nothing—it may mean everything. Doctor Emerson says that the more laboratory work he has done the harder he must study to see how that work is to be used in order that he may better understand his patient. The money standard too often influences the student and practitioner of medicine. However, the physician's services should not be dependent entirely upon the possibility of securing the fee, for medicine is essentially an altruistic profession. Another frequent mistake is the thought that surgery is a very desirable treatment for a medical trouble, and in consequence many patients, with certain functional neuroses will show up at a medical clinic, who have had one or more operations, and Doctor Emerson refers to one who had had nine operations for conditions which, studied in retrospect, certainly were neuropsychiatric conditions. Therefore, Doctor Emerson says very wisely that students, and he might have included physicians in active practice, must learn that few things are really settled, and those things that are settled are not permanently so, and that they will have to learn soon how to choose between opinions expressed by different authorities. He quotes a good psychiatrist who made the remark that "truth is a living force in the clinic and laboratory, but truth dies and is embalmed in a textbook." Students must be taught to use the living medical thought as it occurs in medical meetings which they are encouraged to attend and as it occurs in current medical journals. In conclusion, he voices the fact that is uppermost in the minds of many very progressive physicians and teachers of today, that we must fall back upon and make use of institutional medicine, or rather those institutions, well endowed and well equipped in each community, where a physician can carry his patient and there can himself treat his patient with the aid of all the equipment there is in that hospital which he could not possibly afford in his private practice. A medical graduate should be taught that he cannot in private practice give some of his patients the best there is unless he has behind him those institutions which will do a great deal of work for him and for his patient at a price that the patient can afford. That means, of course, that the physician is in charge of his patient all the time and is responsible for him, but is assisted by these institutions which have partially endowed funds. The ideas expressed are very much in line with the ideas advanced recently by those who have taken an active part in the investigation of the cost of medical care, and we are inclined to believe that more and more we shall be obliged to put into practice the recommendations that have been made. This means more use of our well-equipped institutions as they exist today, and perhaps the formation of other institutions, under the control and management of the physicians themselves, but operated as a community asset. No longer can the physician rely upon his own resources, which of necessity must be limited if he is to be individually responsible for them. On the other hand, he can have just as complete control over his patients while at the same time rendering the highest type of service if he will avail himself of facilities that can be offered by community institutions that are owned and operated by the medical profession as a whole, or are otherwise suitably endowed so that their future is secure.

"IN A HELUVA FIX"

In the April number of THE JOURNAL we discussed the action of one of our Indiana insurance companies in refusing to recognize members of pseudo-medical cults in giving statements concerning accidents and illness. The company in question consistently has refused to recognize chiropractors, naturopaths and kindred healers, whether licensed or not. This refusal led to a controversy with the Insurance Commissioner of the State, in connection with the claim of a policyholder who suffered a badly sprained ankle and went to a chiropodist for treatment. Since the publication of the article we have received a letter from a sick and accident insurance company which not only is interesting and amusing but proves conclusively why members of the pseudo-medical cults should not be considered as competent to give a statement as to sickness or disability when indemnity is claimed. Evidence as to incompetency seems to be decided definitely by a report given by an osteopathic physician, and it probably would have been a good deal worse had it been given by a chiropractor, in connection with a supposed disability suffered by a policyholder. The company was unable to determine whether the claim is for accidental injury or sickness. The original report, omitting all names, was as follows:

"Diagnosis:

2nd dorsal rotated to left.
3rd dorsal rotated to right.
4th dorsal rotated to left.
2nd rib sprung (on left side).
3rd rib sprung (on left side).
4th rib slightly slipped on left side."

This diagnosis is given upon the regular bill head of the osteopathic physician, and offered as a basis for settlement of the claim of the policyholder. We agree with the representative of the insurance company who wrote us that "it seems evident that the policyholder was in a 'heluva fix'

with so much the matter with him." We also agree with the representative who says, "Seriously, it does seem that this sort of thing is all wrong. We cannot understand why intelligent people will continue to patronize such practitioners. And we also fail to understand why insurance companies should be forced by law to pay claims for disabilities based upon such ridiculous statements as the one we have exhibited to you."

MEDICAL COWARDS

The average physician is a moral coward. He is afraid that his practice will suffer if he takes an honest and much-needed stand in opposition to some of the things in his community that are in every way detrimental to the interests of the people, especially as concerns their health. The richest man in the town can own insanitary and disease-breeding rental property; the leading newspaper can carry all sorts of fraudulent medical advertising and publicly uphold medical quacks; the leading preachers may solicit patronage for quacks and members of pseudomedical cults; the bankers may defy quarantine and other health regulations; the public school teachers may disseminate pernicious and false teaching concerning the value of smallpox and diphtheria prevention; the Christian Scientists may be responsible directly or indirectly for any number of preventable deaths; and in fact there may be almost any kind of inconsistent, unreasonable and highly detrimental things occurring in the community and not a single physician will offer a word of protest. Is it any wonder that health matters and even the practice of medicine are getting under lay control and dictation? How long will medical men continue to be prize examples of first class cowards?

PHILADELPHIA SESSION OF THE AMERICAN MEDICAL ASSOCIATION

This year's session of the American Medical Association will be held in Philadelphia, June 8th to 12th, inclusive. It is superfluous for us to go into detail concerning all that is offered in the way of instruction and entertainment, though we do want to emphasize the duty that falls upon every progressive medical man in making an effort to attend the session if it is at all possible to do so. The American Medical Association not only is the largest and most progressive medical organization in the world, but its annual sessions offer a virtual postgraduate course that few can afford to miss. Every known specialty is represented by a section which is offering papers and discussions by the foremost specialists of the country, and not a few of the speakers will be from abroad, having been secured by special invitation. There also will be given scientific demonstrations and exhibitions that will prove of unusual variety and significance as indicating the progress of medicine. The usual social features are scheduled, and Philadelphia, through its citizens as well as the local medical profession, offers a warm welcome. Those who contemplate attending the session are reminded that there are reduced railroad fares from all sections, and arrangements have been made for an abundance of sight-seeing tours to historic places in and around Philadelphia. Full information concerning this session may be found in the Convention Number of the *Journal of the A. M. A.*, published on May 9th, or specific information concerning any feature of the session may be obtained by writing to the chairman of the Committee on Arrangements, at 304 Chamber of Commerce Building, 1129 Walnut Street, Philadelphia.

GROUP CLINICS

Following closely on the heels of the announcement in the lay press by Ray Lyman Wilbur, Secretary of the Interior and ex-president of the American Medical Association, that group clinics may solve the problem of giving competent and adequate medical and surgical services to all the people all the time, we have received a report from the Committee on the Cost of Medical Care concerning a study of private group clinics in the United States which proves interesting reading. The report says that there are approximately one hundred fifty such clinics, with a total medical personnel of about two thousand. The majority of these group clinics are in the Middle West, as almost none are to be found in the eastern states. The average capital investment in plant and equipment, excluding hospital facilities, is $10,000 per practitioner. There are two classes of practitioners in the clinics, first, those who share in the ownership of the clinic's assets and participate in its profits, and, second, those employed solely on a salary basis. The former group is composed of relatively older men. Most of the clinic physicians are members of the American Medical Association, and most of them belong to the specialized associations. The most striking development in group clinic practice is the business office, a separate department under a lay business manager who is an employee and whose duties and responsibilities are determined by the clinic physicians. Financial dealings with patients usually rest in the hands of these business managers, though the wishes of the physicians in regard to the establishment of fees prevail. The data concerning the gross and net income per practitioner showed gross incomes from approximately ten to twenty-five thousand dollars, and net incomes from approximately six to eighteen thousand dollars. The average net income per physician is nearly ten thousand dollars. Among conclusions we find the following: "Clinics have in general provided net incomes for physicians which make possible the continued development of group practice. The removal of financial and administrative responsibility from the individual clinic practitioner has made him more completely available for professional service and has in some clinics increased his opportunities for scientific

research and developments. The employment of business managers has usually resulted in increased economy and efficiency. The establishment both of fees and of collection policies is based upon financial data obtained through conventional business methods. Inasmuch as the financial status of the clinic patient is usually investigated, group clinics probably perform less free service than would an equal number of independent practitioners doing the same volume of work."

The final conclusion of the committee is interesting and is as follows: "Private group clinics through their available equipment and coordination of medical specialists are the physicians who fulfill the basic requirements of good medical care with economy from which both the clinic members and the public may benefit."

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

INDIANA medical men will be interested in knowing that the Claypool Hotel, Indianapolis, has been selected as headquarters for the coming session of the Indiana State Medical Association.

THANK fortune! The Jones-Cooper maternity bill, which would re-enact in perpetuity the old Sheppard-Towner law, failed to pass Congress, as it was caught in the filibuster that swamped Congress during the last session.

WE especially ask the readers of THE JOURNAL to scan the advertising pages carefully, and we shall appreciate it if when writing any of the advertisers attention is called to the fact that the advertising was seen in THE JOURNAL.

AND now we are told that birth control may be effected by serum injections. The new method has been tried out in Russia with fairly satisfactory results, and it is expected that ere long the technique and results will be approved. At present it is unknown what the ultimate effect will be, though time will settle that.

THE attempt to revive and continue the old Sheppard-Towner Act failed, largely as the result of pressure of other bills before Congress which took precedence. The way had been fairly well greased for the passage of the bill. In these times of depression and high taxes we can be thankful that the bill did not pass.

IN the last few months the Federal Government has made a seizure of a large number of drug products that are found to be adulterated or mislabeled. Nearly all of these seizures occurred in the east, mostly in New York. We wish the Federal authorities would do a little investigating in Indiana where we have reason to believe there is need of some good work.

WE have harped a good deal about the necessity of the periodic health examination, but, as has been stated so pointedly by certain lay writers, the recommendation will appear in a better light if the physician will take his own prescription. At the present time few physicians and few nurses resort to the periodic physical examination for themselves. Why not practice what we preach?

IT is interesting to note that a paid attorney of the chiropractors has advised the chiropractors to build their own hospitals, inasmuch as at present not a hospital organized under the laws of Indiana has a right to accept or reject anyone as an attending physician or as a patient. It really makes us smile when we think of chiropractors attempting to build and operate a hospital, and particularly at this time when chiropractic seems almost ready for the discard.

DR. FRANCES T. BROWN, of Indianapolis, will be the first woman interne in any of the Indianapolis hospitals, her appointment having been made recently. We take out hats off to the woman physician who is so anxious to be thorough and competent that, as in the case of Doctor Brown, she tells hospital authorities that as an interne she expects no more consideration or favors than granted to the male internes. She ought to make good, and no doubt will, for she evidently is made of the kind of stuff that spells success.

THE members of the Indiana State Medical Association may not be fully aware of the fact, but they should know that the Bureau of Publicity of the Association is doing a wonderful work that has been commented upon favorably all over the United States. The articles, prepared and released for publication in the daily press, are an educational feature that is accomplishing great good. The articles are trustworthy and very generally used in newspapers throughout the state. It is an educational campaign well worth while in accomplishing results.

A CHIROPRACTOR attempted to force the Indiana State Board of Medical Registration and Examination to give him an examination and license to

practice medicine if he passed the examination. The matter was taken to the superior court of Marion county, where the judge gave an adverse decision for the chiropractor. The court found that the Board could give examinations or refuse them at its own discretion. In defense of the Board's action it was said that the Board did not consider the school of which the chiropractor was a graduate a recognized school.

SEVERAL surgical instrument dealers doing business in Indiana have sent out a circular letter to the profession saying that from now on they will not give any form of rebates on surgical instruments, orthopedic appliances, drugs or other supplies furnished patients. The point is well taken that the practice is unethical and unfair to the patient, and aside from that is demoralizing to business. Physicians who have been receiving rebates or commissions on prescriptions may not like this attitude of the dealers, but the stand is in keeping with ethics which the medical profession should approve.

DR. JOSEPH K. NARAT, Chicago, Illinois, has suggested in the February number of the *International Journal of Medicine and Surgery* that spots caused by tincture of iodine can be removed quickly from linen by using a solution of ordinary fixing powder, such as is used in photographing processes. This can be found in every x-ray laboratory. The chemical name is sodium thiosulphate and it is popularly called hypo. Silver nitrate spots can be removed with ten percent solution of potassium iodid. Fresh blood spots on linen should be touched immediately with peroxide of hydrogen solution.—*The Stethoscope.*

THE American College of Physicians at a recent meeting filed a protest against federal and state laws limiting the rights of physicians to prescribe drugs and liquors. The resolutions adopted stated that unrestricted medical treatment of disease by properly licensed physicians should be granted and physicians in general should not be penalized because of the misuse of medical methods by a very small percentage of so-called medical and non-medical men. The resolution concludes, "Let the profession be its own judge of how it can best treat the sick and properly penalize those who flagrantly abuse their licensed or unlicensed trust."

THE Commissioner of Health of Chicago recently has called attention to a new source of danger that threatens those who patronize the miniature golf courses, and it is the possibility of acquiring ringworm and other skin infections through the handling of the leather-covered golf clubs. The facts were determined through cultures made from scrapings of four clubs used on miniature golf courses, seventy-five percent of the tubes showing fungi accepted as pathogenic for the skin by reputable dermatologists who also are micrologists. Evidently those who are going to play miniature golf will be advised by health boards to furnish their own clubs.

AT the recent meeting of the American College of Physicians it was announced by Dr. Cyrus C. Sturgis, and Raphael Isaacs, of the University of Michigan, that a substitute for liver extract has been found which is tastier, cheaper and just as effective in the treatment of anemia, and it consists of desiccated, defatted hog's stomach. Experiments on fifty patients showed that both subjective and objective changes are identical with those in liver treated patients. The discovery should be of considerable economic value inasmuch as patients suffering from pernicious anemia oftentimes are compelled to consume a certain amount of remedial material for the remainder of their lives.

THE executive committee of the Indiana State Medical Association has approved the plan of the Indiana Congress of Parent-Teachers to have a summer round-up of children for the promotion of health. The project is designed to promote the education of parents to the need for periodic examinations in children by family physicians and dentists. The sponsors for the Congress say that they do not advocate free medical or dental service except to the indigent, but that the child should be referred to its own physician and dentist. The project is to be carried on entirely by parent-teacher associations in local communities in the state, in cooperation with their own physicians and dentists and local health facilities.

WE are amazed that in this enlightened period a person of mature age and apparently intelligent will continue taking Christian Science treatments for weeks and perhaps months for the relief of a curable abdominal disease, and when unconscious, twenty-four hours before death, competent medical men are called in to do something. Such an occurrence has come to our attention. It is almost criminal to encourage such blind faith in a religion and a practice that never did and never will cure anything in the way of real disease, and the worst of it all is that so many innocent persons suffer, even unto death, by following the inconsistent advice of a sect whose teachings and works are neither Christian nor science.

A VERY commendable movement is on foot to limit the use of narcotic drugs to legitimate medicinal needs. A campaign has for its effect the two-fold purpose of reducing the extent of drug addiction and of forestalling legislative restriction of the individual physician's use of narcotic drugs. Many physicians, honest in intent, find too many conditions in which they consider that a narcotic is indicated, and while it may be true, as charged, that the large percentage of drug addicts got their start through the innocent prescribing of narcotics

by physicians, yet much can be accomplished in limiting this criticism if every physician will limit his prescribing of narcotics absolutely to those situations in which the narcotic may be considered indispensable.

It is not generally known that Charlie Chaplin is greatly interested in and a substantial supporter of the National Society for the Prevention of Blindness. In his last picture, "City Lights," it is disclosed that behind the wistful expression which Chaplin wears there is a genuine interest in the prevention of blindness. In the film story Chaplin plays the part of a tramp in love with a blind girl whom he aids in her successful search for medical treatment which is to restore her vision. Chaplin says that blindness is one of the saddest of human afflictions, and he is very much interested in the efforts being made to eliminate all causes leading to unnecessary blindness. In his new picture he has portrayed a profound understanding of the tragedy of blindness.

We still receive an abundance of literature concerning so-called denicotinized tobacco which appears to be the product of several different manufacturers. Notwithstanding the fact that most of the claims are, in a slang term, "applesauce," yet we note that there are quite a number of physicians who are willing to endorse the product. Perhaps their endorsement is bought with a small batch of cigars or a carton of cigarettes, as we believe was the case when twenty thousand physicians were such blooming idiots that they endorsed a well-advertised cigarette and probably have been sorry for it ever since. Denicotinized tobacco is no less injurious than some tobaccos which have not been denicotinized. Furthermore, it should be remembered that nicotine is not the most injurious part of the tobacco.

A publishing company in New York City is asking prospective customers to send a remittance to cover the price of a "wonderful textbook," and as a side issue you also order a copy of a book entitled "Birth Control." With the advertising goes a poster page advertisement with photogravure reproductions of good-looking girls and women, and suggestive titles and reading in connection therewith. Just why the United States Postal Department does not suppress announcements of that character and refuse to have books such as advertised sent through the mail is hard to understand. Certainly we cannot understand why the publisher would think that physicians would be interested, and yet evidently they have expended considerable money in trying to interest the medical profession.

Physicians should disabuse the minds of most lay persons concerning the supposed trivial effects of measles. In reality measles is a dangerous disease, though apparently less dangerous between the ages of five and fifteen than it is later. Under five years of age, and especially under one year of age, measles is exceedingly dangerous, but seldom fatal to children over five years of age who are in good health at the time of the attack, providing they are given good care while sick and are not allowed to go out too soon. The disease is very often fatal in those who are undernourished or not in good health. The patient should be put to bed immediately and kept there until all symptoms have subsided. The disease is most contagious when the patient feels badly and the eyes are red and sensitive to light. The most dangerous complication is pneumonia.

The *Indianapolis Times* for March 18th carries an illustrated article to the effect that Dr. Richard Morris, director of the photographic division of the Methodist Hospital, at Indianapolis, has invented a camera to take pictures of the interior of the ear, and is at work on a camera which will take pictures of the back of the eye. It is announced that he already has equipment with which he can photograph the interior of the stomach, bladder and other parts of the body. The stomach camera is said to be his own development, and it is reported that the patient swallows a little camera in which there are sixteen pinpoint lenses. A tiny bulb of 12,000 candlepower makes pictures possible. The negatives though very small are so clear that enlargement can be made to show the progress of healing measures, all of which makes sensational reading for the lay press!

The American Medical Association has started a campaign to limit the use of narcotic drugs to legitimate medicinal needs. It is pointed out that there are relatively few instances demanding the administration of opium or cocaine derivatives and there are many substitutes therefor that may be available. Approximately twenty-five percent of narcotic addictions result from the beginning of the habit through previous use of drugs as medical treatment. The fact that there are so many drug addicts should impress upon the physician the necessity of limiting his prescribing of narcotics absolutely to those situations where a narcotic may be considered indispensable. Thus he will avoid the possibility of unfavorable criticism. The medical profession should be purged of all those who have any conscious part in the creation and maintenance of narcotic addiction.

A crabby patient says that notwithstanding the general depression and difficulty on the part of most people to keep the wolf from the door, he finds that the average physician apparently does not seem to care whether he works or not or gets any fees, for he has plenty of time to fool around, visit with confreres and tell stories while serious-minded patients requiring attention are waiting patiently in the reception room. Of course we quite agree with the crabby patient that doctors should

work with reasonable rapidity and conscientiously during office hours, giving attention to patrons as promptly as possible, but perhaps there are a few physicians like the one who, while entertaining a friend when the waiting room was full of patients, said, "For thirty years I have been waiting for those patients. Now let them wait for me." That is not the proper attitude to assume.

A PROMINENT physician of wide experience recently said in substance that while for many years he had ordered his seriously ill patients to avoid having company he never quite appreciated the value of that advice until he became sick himself and found that even the short visits of his friends in the profession were thoroughly tiring and interfered with his recovery. Hospital authorities tell us that the afternoon and night following visiting day always finds the majority of the patients confined in the hospital to be suffering from nervousness, insomnia, and not infrequently sharp rises in temperature. When patients are convalescing it may be permissible and even beneficial to have a reasonable amount of company, but on the whole patients who have very much the matter with them are far better off if kept quiet and not disturbed by the well-meaning visits and attention of friends and acquaintances.

WE are in entire sympathy with the suggestion of the president-elect of our Association that a committee should be appointed to make a study of the medical service in the institutions owned and operated by the state. This study should include the laws governing the institutions, the salaries paid, duties and responsibilities laid upon the physician in such service, duties of the hospital superintendent, responsibilities, etc. It is thought that such an investigation will show that the present status of physicians in some of our state institutions is far below the level of the dignity and responsibility which should be that of such physicians. It is reported that conditions gradually have developed and grown up in some of our state institutions wherein the medical service from the standpoint of the physician is quite maddening and intolerable. Such a situation naturally is reflected in poor medical service to the inmates.

IN Germany but five percent of the medical profession is engaged in private practice. The percentage is higher in other countries having sickness insurance, but in few does it reach fifty percent. In the near future the majority of the medical men in this country must face a new social condition in connection with the laws of workmen's compensation in accidents and probably in disease. Already there are indications of a beginning of a new social and economic condition, and some states actually are flirting with socialistic ideas as pertaining to the rendering of medical and surgical service to the people. There are forty-eight states and it will be a miracle, as pointed out by some writers, if some of these states do not try an experiment, especially in times of depression which always produces social legislation. It is time for the medical profession to give the matter serious thought in an endeavor to avoid some of the threatening evils.

UNQUESTIONABLY the medical profession owes the public more knowledge concerning the possibility of making childbirth painless. A few years ago much was said concerning "twilight sleep" which, in a large percentage of cases, no doubt does aid in producing a painless childbirth, but it has been discovered that "twilight sleep" is not without danger to both mother and child, and in most maternity hospitals it is not employed at all or at least to a very limited extent. Quite recently, sodium amytal, a comparatively new drug, has come into use to aid in the production of either analgesia or anesthesia, and to aid in effecting painless childbirth. It is said by those who have used the drug in a large number of cases that it seems to be absolutely harmless to both mother and child. However, it should be remembered that in some patients sodium amytal produces a nervous and mental excitability that may be very annoying to patient and attendants though otherwise inoffensive.

A GOOD deal of newspaper publicity has been given to the report that a new scientific "breath-smeller" is ready for use by police, enforcement officers in detecting souses, and that it registers any degree of drunkenness merely by catching some of the drinker's breath and is so sensitive that it detects alcohol even when all odors are expurgated from the breath. It is reported that this new "breath-smeller" has been perfected by a physician connected with the Indiana University School of Medicine. Its value is supposed to be greatest in testing drunken drivers of automobiles or for that matter testing anyone whose untoward acts may be suspected as coming from the effects of alcoholic beverages. In passing it may be mentioned that it is one thing to prove the existence of an alcoholic breath and quite another to prove that the alcoholic breath comes from any considerable quantity of alcoholic beverages, or for that matter beverages in sufficient quantity to have any appreciable effect upon the actions of the person.

NEW YORK laws prohibit physicians from giving birth control information. Evidently such prohibition does not apply to a lot of lay birth control advocates who, if all reports are true, have been spreading the knowledge to all who apply for it. We don't believe that giving birth control knowledge ever can be confined to members of the medical profession or anyone else delegated as teachers, but it is inconsistent to have on our statute books laws which forbid physicians from doing that which if necessary or advisable should be

their privilege. Recently the New York Academy of Medicine has passed a resolution asking a change in the state laws so that physicians will be exempt from existing inhibitions concerning birth control information. The Academy also recommends the teaching of contraceptive methods in medical colleges and hospital clinics and the organization of birth control clinics in hospitals and dispensaries wherever needed. This is far better than giving the matter full rein in the hands of lay persons.

SOME lay persons have seen fit to criticize bitterly the physicians who testified in the Draves murder case, and wonder why there should be such a difference of opinion among medical men. It may be interesting to know that some of the physicians who testified for the defense do not possess any great respect in the medical profession. It also must be admitted, as pointed out in an editorial in the March number of THE JOURNAL, that under our present plan of securing expert testimony it is quite possible to buy testimony of almost any description, and while it is entirely probable that occasionally very well-educated and highly trained physicians may have honest differences of opinion, yet expert testimony in courts of law will not be such a travesty as it sometimes is at present. To our notion, we never will have the most skilled and the most trustworthy medical testimony in courts of law until such testimony is procured at the discretion of the court and without any obligation of any kind whatsoever to either prosecutor or defendant.

THE United States Public Health Service has sent out a bulletin which emphasizes that the administrative health officer should be trained for his work. This training should cover fundamentals and afford an opportunity to acquire experience in the practical conduct of the work of a health department. A course of this type will necessitate a close coordination of a teaching institution and administrative health organizations. However, such training facilities are not likely to be used extensively unless a system is perfected which will provide means whereby training can be made readily available, and unless there be some provision for making training and qualifications for employment in advance. The state health department seems to be the agency best able to sponsor a plan of training; however, the active teaching should be under the management of an educational institution such as a department of preventive medicine in a medical school or a school of hygiene. Our own Indiana University School of Medicine is in a position to assume responsibility for the administration of such a course as well as a major part of the actual teaching.

A BILL providing for certain amendments to the present medical practice law has been prepared and is ready for introduction into the present session of the legislature of the State of Michigan, according to information contained in the *Bulletin of National Social Councils*. One of the amendments will require the licensing board to adopt a minimum requirement that must be met by the physician who seeks to become a specialist. Having met that requirement the Board may issue a certificate attesting to the applicant's qualifications as a specialist. The sanction is not a mandatory one nor is it a compulsory enactment. It merely provides that he who desires such certification may obtain it when he meets the adopted requirements. There is no penalty for not possessing such certification. It is an educational provision. This is a step in the right direction. Certainly there should be some way by which the sheep can be separated from the goats in the matter of medical and surgical specialists. There are altogether too many physicians who without the slightest special training announce themselves as specialists, and even go so far sometimes as to announce that the practice will be limited to a specialty. Both the general medical profession and the public is harmed by this sort of a privilege.

LAY newspapers and magazines at present seem to have great sport in finding fault with the medical profession. As one layman has summed it up there is a claim that "there is lack of personal relationship between physician and patient; the periodic medical examination is difficult to obtain; the requirements of certain hospitals for payment in advance makes it difficult for patients to obtain admission; there is a lack of thorough diagnosis and diverse charges are made for the same treatment; snap diagnosis is responsible for 'shopping' about; duplication of medical opinion is expensive and totally unnecessary surgery is common; even moderate medical accommodations are beyond the means of patients of the middle class; there is much duplication of effort; the good physician is rushed and oppressed; fee splitting and bargaining in the sale of patients is altogether too common and detrimental to the interests of physician and patient; the selling and buying of physicians on hospital staffs does not insure wise selection, or good service." Little complaint, figuratively speaking, is made concerning the high character of professional work *that may be secured*. The complaint of both the physician and the layman concerns the method of obtaining medical care, the method of paying for it, and the possible wastes that are accruing from it. What are we going to do about it?

ONE of the readers of THE JOURNAL has sent us some correspondence with an insurance company concerning the matter of graded fees for life insurance examinations, depending upon the size of the policy. For instance, the company expects to pay two or three dollars for medical examinations for policies of a thousand dollars and under, and five dollars for policies for all

other amounts. If such companies really were consistent they would increase the amount paid for the examination as the size of the policy increases. Also if they were consistent they would be satisfied with a far more superficial examination at two dollars than one given for five dollars, but in reality every life insurance company expects the very finest kind of service professionally and some of them have the nerve to ask the physician to accept graded compensation for the highest type of service in any case. Any life insurance examination that is at all trustworthy is worth at least ten dollars, and five dollars certainly would be a very reasonable fee. The physician who will make a trustworthy life insurance examination for less than five dollars must be pretty hard up for work or else he makes examinations of the lick-and-promise variety. He can be excused for making an examination for nothing for a poor patient, but there is no excuse for making such a donation to a wealthy life insurance company that profits from his work.

IT is thought that during periods of depression the people take up with all sorts of quackery, from religion to politics, not omitting the actual buying of gold bricks. The astrologer, the numerologist, fortune teller, quack doctor, and manufacturer of proprietary medicine reaps a harvest. Perhaps it has been noted that the Indiana newspapers rather generally contain more pages of quack medical advertising than they have in a decade, and presumably the advertising pays or it would not be purchased so extravagantly by those who use it. As we often have said, it is unfortunate that those who are swindled by these forms of quackery usually are the ignorant and poor, or those who can least afford to part with their money. Of course the newspapers are to blame for accepting this kind of business, but they are out for the money and as long as they are not pricked by a guilty conscience they probably will continue to reap a golden harvest from quack medical advertising. While we are talking about quack medical advertising and its appeal during periods of depression we are wondering why any rationally minded physicians "fall" for the quack remedy advertising carried by some supposedly reputable and ethical medical journals, and yet it appears highly probable that patronage is bestowed or otherwise the manufacturers of quack proprietaries would not spend their money in advertising in medical journals. But why should physicians, supposedly discriminating, join the great army of dupes?

A YOUNG surgeon of Spokane is said to have testified adversely in a malpractice suit concerning the services of one of his confreres. Following the action he was in a sense boycotted by the physicians and hospitals of Spokane, and in retaliation he brought a suit for damages against several of the leading physicians and secured a verdict of $25,000. According to all reports he is a competent and well-trained physician, member of his county, state and national associations, and his only mistake was in testifying against a fellow practitioner who perhaps deserved to be exposed, although we know nothing about the merits of the case. Anyway, the newspapers have made a great hullabaloo over the matter and used the news, pictured, in all its weird phases, in photogravure sections to a public that is eager for sensationalism. All of which reminds us that the young surgeon in the final analysis accomplished nothing by his tactless conduct, for though he may have won his indemnity suit and gained popularity with a public through advertising, yet he has estranged himself from ethical medicine and that is something that cannot be recompensed by commercial gain. On the other hand, there must be some physicians in Spokane who now know that it is a fairly good policy to keep the mouth closed when thinking of condemning a fellow practitioner, even though condemnation may be the truth. Whenever you monkey with a buzz-saw you are liable to get hurt, and traducing character and intent of purpose is a buzz-saw which should be omitted from our list of playthings.

WITH the opening of spring we begin to think about immunization against typhoid fever, hay fever, and some other conditions that are prevalent during the summer months. The American people gallivant about a great deal, and every family that owns a Ford or Chevrolet, and most of them do providing they do not own better cars, feels called upon to see some of the country, and not always are they careful of the safety and quality of food and drink, and in consequence not infrequently some of these gallivanters pick up typhoid. The value of typhoid vaccination should be impressed upon all people who wander away from home and depend upon food and drink the safety of which is unknown despite the efforts on the part of boards of health to protect the people by condemning unfit water supplies and dangerous food. The hay fever sufferer in fully seventy-five to eighty percent of the cases can find the cause if he or she will go to the trouble and expense of having a competent physician determine the pollens that are the direct cause of the hay fever in the individual case, and then immunization treatment with the proper biological products instituted before the hay fever season begins. Of the utmost importance is the necessity of determining the offending pollen or pollens, and afterwards in giving the biologic treatment in sufficient dosage over a prolonged period. It is not too early for the average physician to begin thinking seriously of the duty he owes to his patients as well as himself in recommending and giving these preventive treatments to patients where indicated.

IN an address on "The Future of Medical Practice," delivered at the dedication of the West End

Health Center, Boston, September 15, 1930, by Dr. Lee K. Frankel, second vice-president of the Metropolitan Life Insurance Company, some very interesting points were emphasized. Some of the ideas expressed in this address are as follows:

"It is fundamental in modern industry that we eliminate waste. Machinery has been developed to obviate unnecessary human effort. Industry and commerce are making continuing self-appraisals to ascertain whether their methods and practices are inadequate and obsolete, and, if so, to find newer and better ones. In financial circles we have mergers and unions, based on careful appraisal and study, all with the thought of greater efficiency and saving of waste. If we are to apply this principle to saving of the wastage of unnecessary illness and premature death, medicine, too, must undertake a self-appraisal to ascertain whether its organization, methods and practices today are in accord with this desire and purpose.

"Such appraisal must come from within, from the medical profession itself. It must be impartial, dispassionate, and comprehensive. It presupposes a thorough study of the relation of the physician to his patients, to the hospital, to the clinic and to the lay organizations which aim to cooperate with him in the fulfillment of what I believe to be the common desire, namely, the providing of adequate care of illness and prolongation of life. Only such an intensive study and appraisal will bear fruit. Diatribe and invective will get us nowhere."—*Bulletin National Safety Council,* February, 1931.

A Governor Looks at Chiropractic.—Governor Buck of Delaware has returned to the legislature, without his approval, a bill to create a board of chiropractic examiners and to regulate the practice of chiropractic. His summarization of the reasons for his veto is so clear and terse that it should be read by the legislators and governors of every state that is threatened or already afflicted with this cult. His statement follows:

The purpose of the act, as I understand it, is to legalize the practice of chiropractic in this state. Practitioners of this cult are not recognized now. Do they profess to be doctors in the same sense of the term as is commonly understood to apply to men and women of the medical profession? Insofar as I am able to determine, there is not a recognized medical school in the country that includes in its curriculum a course in chiropractic. This fact in itself seems singularly significant.

Even to the lay mind the idea that all disease of whatever character is due to spinal displacements of a mild sort, and that cures of such ailments as tuberculosis, smallpox, diphtheria, scarlet fever and others can be effected by manipulation and fingering of the spine is preposterous.

Before returning this bill to you I have satisfied myself that the training and education a chiropractor, or drugless healer, needs to practice his art does not fit him properly to advisedly treat the sick, inasmuch as he is not qualified to diagnose ailments nor recognize communicable diseases and to take measures to control them. He is therefore an opponent to the department of health.

Wherefore, it seems to me it would be inconsistent for the legislature to appropriate, as it will do, money for the state board of health, which board is trying to eradicate communicable diseases, and at the same time legalize the practice of a cult which does not believe in the germ theory of a disease but does teach and believe that such diseases as scarlet fever, etc., are due to a distracted vertebra and the method to prevent and cure such disease is to see that every body has a normal spine.

—*Jour. A. M. A.,* April 4, 1931.

RESEARCH being done at the present time on obesity and its causes seems to indicate that a great many cases of obesity are rather directly the result of the psychology of the subject. It seems that many fat people are overweight because they have been taught or have taught themselves to give too much thought to their food. These people get more than the usual enjoyment out of eating; hours in advance they anticipate their meals with the keenest enjoyment; they plan their menus so that eating will be as pleasurable as possible; they eat *cum magno gusto,* and remember for weeks the delights of a particular meal. The old adage, "Laugh and grow fat," is undoubtedly founded upon sound fact. For the correction of obesity there are no end of remedies—some sensible and others not. The conclusion reached by the research workers is that many people can bring about a perfectly safe change if they can teach themselves to pay less attention to food. It is suggested that the obese resolutely deny themselves the pleasure of thinking about food. This will not be easy, but it would seem that there are more important things to think about than good things to eat. They shall eat at meal time with as little thought as possible for the viands before them, and shall teach themselves to be less "food-minded" and to limit the intake. Simple foods are far less tasty and enticing than culinary artistic triumphs. Since it is mostly women who wish to reduce, and it is women who do most of the cooking, we suggest that simple foods well prepared, but without the "flub-dubs," will just suit the men and children in the family. When there are so many important things to do and think about, it seems relatively easy to put this simple plan into practice, and we suggest giving it a trial. Certainly it will be safe, will mean less work for the cook, and save expense. If it then gets results we shall have an antidote for this over-emphasis which is being put upon food at the present time.

IN a previous number of THE JOURNAL we said that we had received reports from various sections of Indiana to the effect that some public health nurses are "rubbing the fur the wrong way" in connection with their contact with physicians, and that it does not augur well for the service rendered. The administrator of the division of public health nursing for the Indiana State Board of Health evidently does not relish constructive criticism of any kind, and attempts to bring us to task in one of the Board's publications by telling about the wonderful humanitarian and helpful work done by the public health nurse, and infers that each and every one of the nurses in the service of the state are above suspicion or criticism as to

conduct. We already have intimated in the article to which exception is taken that in general the public health nurse is doing a very valuable work, but that *some* of the nurses have been guilty of conduct that is not in keeping with either the best service or the best cooperation between the medical profession and the public health nurses, and we reiterate that statement as based upon complaints of reputable physicians in various sections of the state. The fact of the matter is that what we need in Indiana is a little more friendly cooperation between all of the agencies that have anything of any kind whatsoever to do with sick people. Nothing is to be gained by "high-hatting" one another or by throwing brickbats. If the physician is at fault in not cooperating with the public health nurse or any other qualified nurse and recognizing her value then he deserves censure, and in like measure the public health nurse or any other nurse who is a law unto herself and minimizes the skill and the judgment of the physician ought to be criticized and even relieved from duty. Let's get it out of our heads that all physicians and all nurses are paragons of perfection. Let's give credit where credit is due, but let us not scorn constructive criticism that will better our service whether given by physician or nurse.

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP
ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION
INDIANAPOLIS

Question: What is the law in regard to medical and surgical attention in industrial cases?

Answer: The Workmen's Compensation Law of Indiana provides in Section 25 of the 1929 Act (page 537) as follows:

"During the first thirty days after an injury the employer shall furnish or cause to be furnished, free of charge to the injured employee, an attending physician, for the treatment of his injuries, and in addition thereto such surgical, hospital and nurse's services and supplies as the attending physician or the industrial board may deem necessary.

"And during the whole or any part of the remainder of the period of disability or impairment resulting from the injury, the employer may continue to furnish such physician, services and supplies. If, by reason of the nature of the injury or the process of recovery, treatment is necessary for a longer period than thirty days, the industrial board may require the employer to furnish such treatment for an additional period, not exceeding thirty days. The refusal of the employee to accept such services and supplies, when so provided by the employer, shall bar the employee from all compensation during the period of such refusal.

"If in an emergency or because of the employer's failure to provide such attending physician or such surgical, hospital or nurse's services and supplies as herein specified, or for other good reason, a physician other than that provided by the employer treats the injured employee within the first thirty days, or necessary and proper surgical, hospital, or nurse's services and supplies are procured within said period, the reasonable cost of such service and supplies shall, subject to approval of the industrial board, be paid by the employer."

Section 26 limits the liability of the employer for these services to such charges as prevail in the same community for the same service to injured persons of like standard of living when the service is paid for by the injured person.

In addition to these services for the relief of the injured the Board is given the power, under Section 64, to appoint a physician or surgeon to make necessary medical examination of the employee and to testify in respect thereto. For these services the physician is allowed traveling expenses and a reasonable fee to be fixed by the Board, "not exceeding ten dollars for each examination and report, but the board may allow additional reasonable amounts in extraordinary cases."

Under Section 65, the fees of the physicians for their services under this Act are made subject to the approval of the Industrial Board; and the Industrial Board "may withhold the approval of the fees of the attending physician in any case until he shall file report with the industrial board on the form prescribed by such board."

The form upon which the physician makes application for adjustment of his claim for physician's fee before the Industrial Board is Form No. 48. In view of the fact that the Appellate Court has held that the Board is not obliged to mail the forms out, although as a matter of accommodation they do so upon request, the form itself is copied in this article to aid physicianss who may have occasion to present such an application.

INDUSTRIAL BOARD OF INDIANA
(Workmen's Compensation)
Form No. 48
APPLICATION TO THE INDUSTRIAL BOARD FOR THE ADJUSTMENT OF CLAIM FOR PHYSICIAN'S FEE

Before the Industrial Board of Indiana.....
Accident Number.....
Application Number.....

.....
Plaintiff,

.....
Address of Plaintiff
vs.

.....
Employer

.....
Address of Employer

.....
Insurance Carrier,
Defendant

The plaintiff respectfully represents to your Honorable Board as follows:

1. That the plaintiff is a regularly licensed, practicing physician of the State of Indiana.

2. That the defendants, as employer and employer's compensation insurance carrier, owe and are indebted to the plaintiff on account in the sum of.....dollars for physician's fee and supplies in the treatment of the injuries of....., occasioned by an accident arising out of and in the course of his employment with the defendant employer, on the.....day of....., 19....., in the County of.....

That said services were rendered as follows:

a. In an emergency.
b. The employer failed to provide such service.
c. The employee was justified in providing such service.

(Strike out the clauses not applicable.)

3. That an itemized statement of said account is filed herewith and as a part hereof.

4. That the defendants refuse to pay said account.

Wherefore the plaintiff prays the Industrial Board to award him against the defendants on said account the sum of $.....

.....
Plaintiff

STATE OF INDIANA } ss.
COUNTY OF.....}

The undersigned plaintiff, being duly sworn, upon his oath says that the matters set out in the foregoing application are true.

.....

Subscribed and sworn to before me, this.....day of....., 19.....

.....
Member of Industrial Board

The foregoing form is used where a disagreement develops between the physician and the employer or the employer's compensation insurance carrier. The insurance companies themselves have their own forms in some instances on which the physicians present their claims directly to them. That being a matter between the insurance company and the physician, the claim made by the physician directly to the insurance company should be consistent with the statements in his application to the Board for the adjustment of his claim.

DEATH NOTES

F. M. HINES, M.D., of Auburn, died April 12th, aged sixty-eight years. Doctor Hines was a member of the DeKalb County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Fort Wayne College of Medicine in 1892.

SAMUEL A. GOODIN, M.D., of Markle, died March 22nd, aged seventy-eight years. Doctor Goodin had practiced in Wells county for fifty-four years. He was a member of the Huntington County Medical Society, the Indiana State Medical Association and the American Medical Association.

C. E. HOLTON, M.D., of Osgood, died April 11th, aged fifty-three years. Doctor Holton was a member of the Ripley County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Kentucky University Medical Department, Louisville, in 1906.

R. S. MASON, M.D., of Oakland City, died March 22nd, aged seventy-one years. Doctor Mason graduated from the University of Louisville School of Medicine in 1889. He was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association.

CLARENCE W. SHAW, M.D., of Patriot, died March 6th, in a Cincinnati hospital. Doctor Shaw was fifty-four years of age. He graduated from the Medical College of Ohio, Cincinnati, in 1901. He was a member of the Switzerland County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

IRVIN J. BECKNELL, M.D., of Goshen, died March 30th, aged eighty-three years. Doctor Becknell had practiced medicine in Goshen for more than forty years. He was a member of the Elkhart County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Indiana Medical College, Indianapolis, in 1873, and from the Bellevue Hospital Medical College, New York, in 1877.

NEWS NOTES AND PERSONALS

DR. FRED MCK. RUBY, of Hibbing, Minnesota, has returned to Union City, where he will practice medicine.

AT the April 21st meeting of the Madison County Medical Society, Dr. Paul Moore, of Muncie, was the principal speaker.

DR. D. D. TODD, of Elkhart, left March 12th for a four-month visit in Europe and for the purpose of study at various clinics.

DR. AND MRS. FRANK A. BRAYTON, who have been spending the winter in Arizona, have returned to their home in Indianapolis.

DR. AND MRS. RALPH ELSTON, of Fort Wayne, left New York City, March 4th, for a trip to Europe where Doctor Elston will study at Vienna.

DR. R. LEE SMITH, who has completed an internship in a Dayton (Ohio) hospital, has opened an office in Osgood where he will practice medicine.

DR. U. G. SOUDER and DR. BONNELLE M. SOUDER, of Auburn, have announced plans for erection of a hospital in Auburn at a cost of $22,500.

DR. JOHN H. WARVEL, of Indianapolis, talked before the members of the Crawfordsville Rotary Club, April 1st. His subject was "Preventive Medicine."

DR. ALBERT H. HALL, of Hoosierville, oldest practitioner in Clay county, has been critically ill for the past two months, but now is improving. He is eighty-four years of age.

THE Carroll County Medical Society met at Flora, April 10th. Dr. J. O. Ritchey, of Indianapolis, addressed the members, his subject being "Focal Infection."

DR. A. L. SCHNEIDER, of Fort Wayne, has been appointed a member of the Fort Wayne Board of Health, to fill the vacancy created by the death of his son, Dr. L. B. Schneider.

THE Gibson County Medical Society met at Princeton, April 13th. A paper on "Treatment of Fractures of Spine and Pelvis" was presented by Dr. G. D. Scott, of Sullivan.

THE Wayne-Union County Medical Society met at the Richmond Leland Hotel, Richmond, March 12th. Dr. A. B. Brower, of Dayton, Ohio, presented a paper on "Recent Studies in Anemia."

DR. BEAUMONT CORNELL, of Fort Wayne, reported a series of cases of "Hypertension and Colitis" at the meeting of the Jay County Medical Society, April 3rd, at the Portland Country Club.

"VALUE of the X-ray in Abdominal Conditions" was the title of a paper presented by Dr. D. S. Beilin, of Chicago, at the March 5th meeting of the Elkhart County Medical Society, held at Elkhart.

THE Fountain-Warren County Medical Society met at Kingman, April 2nd. Dr. Dudley T. Dawson, of Danville, Illinois, presented a paper on "Phases of Insanity of Interest to the Practitioner."

THE Grant County Medical Society and the Grant County Dental Society held a joint meeting, March 24th, at Marion. Dr. E. Vernon Hahn, of Indianapolis, presented a paper on "Trigeminal Neuralgia."

THE Clinton County Medical Society met at the Coulter Hotel, Frankfort, April 2nd. "Some Newer Things in Obstetrics" was the subject of a paper presented by Dr. A. M. Mendenhall, of Indianapolis.

DR. R. L. KERRIGAN, of Michigan City, has recently returned from a month's trip to Mexico, and Dr. E. G. Blinks, of Michigan City, has just returned from Pasadena, California, where he spent the winter.

THE Floyd County Medical Society held a meeting in the Library Building, New Albany, April 10th. Dr. Samuel Overstreet, of Louisville, Kentucky, presented a paper on "X-ray in Gastric and Intestinal Disorders."

DR. E. O. SMITH, of Cincinnati, presented a paper illustrated with motion pictures on "Urologic Problems Common to the General Practitioner" at the March 26th meeting of the Dearborn-Ohio County Medical Society, held at Aurora.

DR. E. H. PLACE, clinical professor of pediatrics in both the Harvard Medical School and the Tufts Medical School at Boston, talked about contagious diseases at the April 3rd meeting of the Terre Haute Academy of Medicine.

DR. JOHN H. HARE, of Evansville, and Dr. A. C. McDonald, of Warsaw, have been appointed members of the Indiana State Board of Health to succeed Dr. John H. Green, of North Vernon, and Dr. C. R. Marshall, of Indianapolis.

AT the April 21st meeting of the Delaware-Blackford County Medical Society the subject, "Policies of Conduct Toward Lay Organizations Treating the Sick," was discussed. This discussion was continued from the last meeting of the society.

DR. WILLIAM G. DOWNS, assistant professor of pathology, Yale University, presented a paper on "A Newer View of Dental Diseases," illustrated with motion pictures, at the March 10th meeting of the Vanderburgh County Medical Society, at Evansville.

THE March 17th meeting of the Delaware-Blackford County Medical Society, held at the Hotel Roberts, Muncie, was in the form of a general discussion in charge of an advisory committee, concerning the policies of conduct toward lay organizations.

THE Hendricks County Medical Society met at Danville, April 17th. Following dinner, reports of committees on organization of "Physicians and Dentists' Business Association" were discussed, and other committees were appointed to report at the next meeting to be held in Pittsboro.

GOVERNOR LESLIE has reappointed Dr. Franklin S. Crockett, of Lafayette, for a four-year term, beginning April 23rd, and Dr. Cecil J. Van Tilburgh, of Indianapolis, for a four-year term beginning May 18th, as members of the State Board of Medical Registration and Examination.

THE April 21st meeting of the Indianapolis Medical Society was a joint meeting with the Methodist Hospital Staff Society, held in the auditorium of the Methodist Hospital Nurses' Home. At the April 28th meeting, papers were presented by Drs. Murray DeArmond and Daniel Laymon.

DR. WILLIAM F. KING was re-elected secretary of the Indiana State Board of Health for a term of four years, starting April 14th. Doctor King

has been secretary of the State Board of Health since 1922 when he succeeded Dr. J. M. Hurty, who resigned. He was assistant secretary for twelve years before being made secretary.

A meeting of the Laporte County Medical Society was held at the Rumely Hotel, Laporte, March 26th. Dr. I. S. Trostler, secretary of the Radiological Society of North America, presented a paper on "Roentgenotherapy of Non-malignant Disease." Dr. J. N. Kelly, of LaPorte, reported two cases of salpingitis and discussed the medical treatment.

At the annual convention of the American College of Physicians held in Baltimore in March, three hundred sixty-seven doctors were made fellows of the College. Three Indiana physicians were made members of the College. They are Dr. Edgar F. Kiser, Indianapolis; Dr. Richard Hugh McDowell Bayley, Lafayette; and Dr. Earl Donovan Skeen, Gary.

Dr. Eric Crull, of Fort Wayne, was made honorary vice-president of the Indiana Tuberculosis Association at the closing session of the annual convention held in Indianapolis, April 15th. G. A. Ballinger, of Richmond, was made president; Dr. E. M. Amos, Indianapolis, vice-president; Mrs. George Davies, South Bend, secretary, and Dr. Alfred Henry, Indianapolis, treasurer.

Newspaper announcements state that work was started April 4th on an addition to the laboratory of Mead-Johnson Company at Evansville. The addition will be 65 feet by 40 feet, and will cost $30,000. The new building will include a research laboratory, plating room, cultures transfer, and animal rooms. There will also be some office rooms in the addition, which will consist of two stories and a basement.

The United States Civil Service Commission has announced that a vacancy exists in the position of physician qualified in tuberculosis in the Regional Office of the United States Veterans' Administration at Dallas, Texas. A man is desired for the appointment. Entrance salary is $3,800 per year. Full information may be obtained from the United States Civil Service Commission at Washington, D. C.

The thirty-second annual meeting of the American Proctologic Society will be held in Philadelphia, June 7, 8 and 9, 1931, with headquarters at the Bellevue-Stratford Hotel. Complete information and programs may be obtained by writing Curtice Rosser, M.D., F.A.C.S., 710 Medical Arts Building, Dallas, Texas. Ethical practitioners are invited to participate in the events of the second and third days of the meeting.

The Laporte County Medical Society held its regular meeting at the Spaulding Hotel, Michigan City, April 16th. Dr. Gilbert Fitz-Patrick, of Chicago, talked on "Cancer" and presented a review of the later reports from the various research laboratories. The meeting was also in honor of Doctor Tillotson, an honorary and life member of the Laporte County Medical Society. Dr. H. H. Martin, of Laporte, presented a brief review of the changes in medicine during Doctor Tillotson's lifetime.

The April meeting of the Clay County Medical Society was featured by an instructive film demonstration of surgical technique. Operations for cholecystectomy, appendectomy and the pathology and treatment of Colles' fracture were graphically shown. The next session, May 21st, will be the semi-annual dinner meeting at the county hospital, when the principal address will be given by Dr. George Bond, of Indianapolis. Membership in the Clay County Medical Society has reached approximately 100 percent.

The annual meeting of the Elkhart County Medical Society was held at the Alderman Hotel, Goshen, April 16th. Dr. Henry Buxbaum, of Chicago, presented a paper on "Treatment of Toxemia of Pregnancy"; Dr. Archibald Hoyne, of Chicago, presented the subject, "Differential Diagnosis of Scarlet Fever"; Dr. J. H. Stygall, of Indianapolis, talked on "Chest Conditions," and at the evening session Dr. N. M. Percy, of Chicago, presented an address on "Appendicitis." A banquet was given at the Alderman Hotel at six-thirty.

The twentieth annual meeting of the Indiana Tuberculosis Association was held at the Hotel Lincoln, Indianapolis, April 14th. Dr. Alfred Henry, of Indianapolis, presided at the luncheon meeting. Dr. A. B. Graham, of Indianapolis, presided at the general session when Dr. William Charles White, of the United Public Health Service, Washington, D. C., presented a paper on "Latest Developments in Tuberculosis Research" and Dr. Kendall Emerson, of New York City, managing director of the National Tuberculosis Association, talked on "Economic Stress and Tuberculosis."

At the April 7th meeting of the Indianapolis Medical Society case reports were presented by Dr. John Brayton and Dr. Clark Rogers. Dr. J. W. Carmack presented a paper on "Sinus Infection in Children." The April 14th meeting of the society was held in the Travertine Room of the Hotel Lincoln. The society was the guest of the Indiana State Tuberculosis Association, which was holding its annual conference at that time. Dr. A. B. Graham, president of the Indiana State Medical Association, presided at this meeting. Papers

dealing with the subject of tuberculosis were presented by Dr. William Charles White, of Washington, D. C., and Dr. Kendall Emerson, of New York City.

THE Faculty of Medicine of Paris (The Medical School of the University) has announced that during June and July a series of post-graduate courses will be presented. The enterprise is conducted under the auspices of the Association for the Development of Medical Relations, a commission sponsored by the French government. The work will be presented in the English language. A nominal fee will be charged for each course, and upon completion of the course the student who qualifies will receive a certificate covering the work. Detailed information may be secured by addressing direct Professeur E. Hartmann, Faculty of Medicine of Paris, 12, Rue de L'Ecole de Medicine, Paris, or Dr. Frank Smithies, 920 North Michigan Avenue, Chicago.

THE next meeting of the Eleventh Indiana Councilor District Medical Association will be held in Delphi, Thursday, May 21st. The business and scientific program will begin promptly at 2:00 p. m. Drs. Edwin Clark and John A. MacDonald, of Indianapolis, will be the out-of-district speakers for the afternoon. The regular banquet will be held at the Presbyterian Church at 6:30 p. m. The physicians of Delphi compose the local committee of arrangements, and the wives of all the physicians in Carroll county compose the ladies' reception and entertainment committee. A cordial invitation is extended to physicians and their wives in adjoining counties of the Eleventh District to the meeting of, Doctor Brubaker, the secretary, says, "the best district society in Indiana."

THE annual post-graduate summer clinics conducted by Cook County Hospital, Chicago, under the auspices of the Chicago Medical Society will be held June 22 to July 3. Dr. N. S. Davis III, secretary of the society, reports that the clinics will be organized to give the practicing physicians in attendance practical instruction in the line of medicine and surgery. In fact, the two weeks will cover an intensive post-graduate study of the latest modern medical developments. Cook County Hospital probably offers a better opportunity for such study than any other hospital in the country.

Medical men from all sections of the United States and Canada are expected to attend these clinics, which will be held from eight a. m. to five p. m. each day and the lectures that will be given three nights each week at eight o'clock. Physicians desiring further information about this post-graduate course should write the Secretary of the Chicago Medical Society, 185 North Wabash Avenue, Chicago.

Medical Veterans' Meeting and Luncheon.—The annual meeting of the Medical Veterans of the World War will be held at Philadelphia, June 9, 1931, at 12:30 p. m. There will be a luncheon on this occasion in the main ball-room of the Bellevue-Stratford Hotel. The ex-presidents of the American Medical Association and the surgeon generals of the government medical services have been invited as guests of honor. There will be only two speakers, but they will be men of national prominence. Gen. George E. deSchweinitz is the chairman of the Committee of Arrangements, and reservations for seats should be made through the treasurer of the committee, Dr. Chas. F. Mitchell, 2003 Pine Street, Philadelphia, a check for $3.00 being mailed to him. Ladies accompanying medical veterans will be entertained at luncheon by the Ladies' Auxiliary Committee at the same hour in the same building. Col. John O. McReynolds, Aux. Res., the president of the medical veterans' section of the Association of Military Surgeons, will preside.

ON February 23rd, this year, a solicitor victimized a number of physicians in St. Joseph, Missouri. His plan was to solicit subscriptions to *Harper's* and other magazines and to offer sets of books as premiums. The subscription blank called for the payment of $9.70 in ninety days. He was supplied with blanks, samples of binding and everything to indicate that he was a bonafide magazine salesman. After he had secured the signature on the subscription blank, he explained that if the subscriber cared to pay cash, or by check, there was a discount of $1.00, and the check could be made payable to "Harper Brothers Publishing Co.," the name printed on the subscription blank. The doctors "fell for it" and the next day he cashed the checks at a local bank and departed. He used the name T. T. McLean and also the name Leroy Dale. Correspondence with the National Publishers Association, 15 West 37th St., New York, indicates that this person has been defrauding physicians in the Middle West for several months.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Ciba Company, Inc.:
- Nupercaine-Ciba:
  - Ampules Buffered Solution of Nupercaine-Ciba 2 cc., 1:200.
  - Ampules Solution of Nupercaine-Ciba 5 cc., 1:1,000.
  - Solution of Nupercaine-Ciba, 2%.
  - Tablets Nupercaine-Ciba, 50 mg.

Lederle Laboratories, Inc.:
- Refined and Concentrated Antipneumococcic Serum, Type I-Lederle.

Mead, Johnson & Co.:
- Mead's Powdered Brewer's Yeast.

Schieffelin & Co.:
Schieffelin Psyllium Seed.
Swan-Myers Company:
Mixed Grass Pollen Extract-Swan-Myers.
Russian Thistle Pollen Extract-Swan-Myers.

INDIANA UNIVERSITY NEWS NOTES

Dr. Burton D. Myers, dean of the Indiana University School of Medicine at Bloomington, went to Durham, North Carolina, April 19th, where he represented the University at the dedication of the Duke University School of Medicine.

Dr. B. D. Myers and Dr. J. A. Badertscher, of the Indiana University Medical School at Bloomington, attended the meeting of the American Anatomical Association at Northwestern University April 3rd and 4th. An entertainment was featured at the Planetarium of Northwestern, where a graphic representation of the universe was studied.

Four Indiana University medical school students who now are studying in Indianapolis spoke to the Bloomington chapter of Theta Kappa Psi, professional medical fraternity, at a smoker April 16th at the Phi Delta Theta house. More than forty-five medical students attended the meeting. C. H. Ade, Floyd Boyer (president of the Indianapolis chapter of Theta Kappa Psi), Dale Dickson and H. S. Bonifield spoke at the meeting.

The Phi Chi professional medical fraternity at Indiana University held their dance Saturday evening, April 19th, in the I. U. men's gymnasium (trophy room) at Bloomington. The dance committee was composed of John R. Surber, Muncie; William E. Sutton, Cambridge City; George W. Willison, Dale, and John M. Young, Indianapolis. Music was furnished by Amos Otstot's Crimson Serenaders. The trophy room was decorated in the fraternity's colors of green and white. Dr. and Mrs. J. A. Badertscher were the chaperons.

Indiana University's 102nd commencement exercises will be held June 15th at five p. m. in the Memorial stadium, according to the announcement of W. A. Alexander, chairman of the commencement committee. Dean Gordon Jennings Laing, of the University of Chicago, will be the commencement speaker, and the Rev. George Craig Stewart, bishop of the Chicago diocese of the Episcopal church, will be the baccalaureate speaker Sunday evening, June 14th. Commencement activities at the University this year will open Saturday morning.

Phi Rho Sigma, professional medical fraternity, held initiation services at the Severin Hotel in Indianapolis Thursday, April 23rd. Following the initiation there was a formal dinner dance. Dr. Walter E. Galbreath is president of the fraternity. The new members are as follows: William R. Ferraro, Paterson, New Jersey; Stanton L. Bryan, Evansville; Ralph Blackford, Middletown, Ohio; Don J. Wolfram, Brownsburg; William M. Mount, Kirklin; Wayne L. Ritter, Indianapolis; Dick Steele, Huntington; William H. Kammerer, Logansport; Robert H. Wisehart, North Salem; Maurice E. Glock, Fort Wayne.

A total of 2,071 patients were served by the three Indiana University hospitals at Indianapolis during the month of March, according to the report issued by Dr. E. T. Thompson, administrator of the hospitals. This exceeds the service record for March of last year by 385 patients. Fourteen hundred and eighteen of the patients served March of this year were out-patients while 653 of the patients were bed patients at the three hospitals. The Riley hospital served the most people with a total of 844 patients. The Coleman hospital came second with 777 and the Long hospital third with 450 patients. The combined daily average of the three hospitals was 371.46 as compared with 353.13 for March, 1930.

Twenty-one seniors of Indiana University have been elected to membership in Phi Beta Kappa honorary scholarship fraternity. Dr. Frank Waters Thomas, who was graduated from Indiana University in 1905, was elected as an alumnus member of the association. The annual spring banquet honoring these new members was held Wednesday evening, April 29th, with Dr. Otto Heller, dean of the Graduate School of Washington University, St. Louis, Missouri, speaking on "The New Humanism and a Literary Criterion."

The new members are Pauline Baumgartner, Fort Wayne; Irol Berg, New Lexington, Ohio; Edgar Cummings, Bloomington; Mary Janet Derr, Boonville; Dorothy Emrick, Fort Wayne; John P. Foley, Jr., Bloomington; Orah Gordon, Foraker; Mary Hale, Fort Wayne; Ruth Horne, Lynn; Floyd James, Bloomington; Albert LaDuke, Jeffersonville; Margaret Light, Elkhart; Bernard Miller, Waldron; Eugenia Nunemaker, Windfall; Charles Peacock, Westport; Foster Pepper, Bloomington; Cillia Rotman, Jasonville; Alice Vawter, LaPorte; Marguerite Vogeding, Garrett; Catherine Walsh, Fort Wayne; Evelyn Wilkinson, Bloomington.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

February 25, 1931.

Meeting called to order at 4:00 p. m.
Present: Wm. N. Wishard, M.D., chairman; C. P.

Emerson, M.D., J. H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held February 17th read and approved.

Release, "Basketball and Physical Examinations," prepared for publication Saturday, February 28th.

Release, Saturday, March 7th—"Sinus Trouble."

Release, Saturday, March 14th—"Rabies or Hydrophobia."

Radio release, February 21st—"Shock Troops Against Disease."

Radio release, February 28th—"Children and Fear."

Speaking engagement:

February 25th—Wayne County Federation of Women's Clubs, Cambridge City, Ind.: "Mental Health."

Report of meeting:

February 19th—Tri-County Medical Society, North Vernon: "Cancer and State Medicine."

Report on the Annual Congress on Medical Education, Medical Licensure and Hospitals held at Chicago February 17, 18 and 19, 1931, received. The secretary was instructed to send this report to the editor of THE JOURNAL for publication.

Subscription for next two years to *Hygeia*, magazine for the laity, published by the American Medical Association, authorized.

Letter received from Bureau of Legal Medicine and Legislation of the American Medical Association stating that "the House Committee on Interstate and Foreign Commerce has amended H. R. 12995, so as to broaden and perpetuate the system of federal subsidies for infant, maternal, and rural health, and having thus amended it has substituted it for S. 255, the bill passed by the Senate." The letter goes on to state that it looks as if this legislation would be passed during the current session. The letter further states:

"One point that may well be made now with respect to legislation of this character is that it is absolutely inconsistent with the President's policy regarding the appropriation of federal moneys for the aid of persons residing within the several states. Certainly it is clear that the President is opposed to the appropriation of federal money for the housing, clothing, warming, or feeding of persons who are destitute, cold, and hungry through no fault of their own, but through the inclemencies of the weather, the failures of crops, etc. How then can he support—as he is undertaking to do—legislation of the character now proposed, that seeks to give to all states, rich and poor alike, at all times, for all mothers and babies and residents in rural districts, in a robust, strong, fairly strong or debilitated condition, the right to benefits purchased by federal money. The President's attitude with respect to these matters is absolutely and entirely inconsistent."

Letter received from the director of the Division of Child Hygiene of the Indiana State Board of Health, asking the cooperation of the Bureau of Publicity in the 1931 May Day program. The Bureau always has lent its support to the Division of Infant and Child Hygiene for this program. The letter in part follows:

"Last year the state dental association decided to appoint one man in each county to represent the association in the child health and protection program. Each member of the board of trustees tried to have appointments made by all county associations in his district.

"I am inclosing a statement of their general program which all these contact men are asked to support. Several of them are working on original projects in their own counties.

"I wish we might have such a contact committee within the state medical association. These men could be appointed in any manner desired, preferably by the local societies, and the general program outlined by the state association."

The Bureau was of the opinion that each county medical society might appoint such a representative if it so desires. A letter was authorized to be written to each county society secretary telling of the suggestion of the director of the Division of Infant and Child Hygiene and stating that the appointment of such a man might be made upon the discretion of each county society. Authorization was also given for a letter to be sent to the State Board of Health stating that the Bureau of Publicity would approve of the appointments provided that local county societies wish to appoint a representative and provided further that the State Board of Health would not in any way influence the various county societies in appointing such representatives.

The following bill was approved for payment:

James H. Stygall, M.D. $33.43

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 4, 1931.

March 4, 1931.

Meeting called to order at 4:00 p. m.

Present: James H. Stygall, M.D., William N. Wishard, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held February 25th read and approved.

The release, "What It Costs to Become a Doctor," read and approved for publication.

Request for speaker:

March 17th—Tri-county Medical Society, Columbus; speaker to talk on "Focal Infection."

Reports of meetings:

February 17—Bar Association of Delaware County and Delaware-Blackford Medical Society, Muncie: "Expert Testimony in the Courts."

February 19th—Tri-county Medical Society, North Vernon: "Cancer Consciousness and Its Necessities."

February 20th—Hendricks County Medical Society, Danville: "New Concepts in Bacteriology."

The following letter was received from the director of the Division of Infant and Child Hygiene, Indiana State Board of Health:

"The 1931 May Day program is planned to promote the organization of a definite year-round child health program. We are trying to plan group programs in accordance with the provisions of The Children's Charter.

"Last year the state dental association decided to appoint one man in each county to represent the association in the child health and protection program. Each member of the board of trustees tried to have appointments made by all county associations in his district.

"I am inclosing a statement of their general program which all these contact men are asked to support. Several of them are working on original projects in their own counties.

"I wish we might have such contact committee within the state medical association. These men could be appointed in any manner desired, preferably by the local societies and the general program outlined by the state association.

"The various clubs and fraternal organizations nearly all have health chairmen. If the contact men in the medical association and the dental association would work with the health chairmen in the various groups and with the school officials, there would thus be formed a nucleus of a very valuable health organization in each county to cooperate with health commissioners.

"We feel that the cooperation of the state medical association in the Indiana May Day-Child Health Day program has been of very great value and are sending material already prepared to you at this time. We hope that the medical association may wish to continue its efforts in this direction with whatever additional projects they may initiate. As you will note the May Day program this year is based on The Children's Charter and the Charter outlines somewhat indefinitely types of things which the medical society may undertake.

"If the Bureau of Publicity desires to issue releases concerning some of the phases of the May Day program, I should be very glad to know the subjects so that we may give these releases due publicity in our own Bulletin.

"I am sending copies of this material also to Doctor Bulson and Doctor Graham.

"In carrying out the plan of the Conference on Child Health and Protection, many counties are working on programs. Since the state medical association is furnishing speakers on request, do you wish to assign someone to speak on programs of this type, or shall we refer requests to the state medical association for certain types of talks? Perhaps you could furnish a list of talks available under the subjects covered by The Childrens' Charter. That would be helpful whether you wished to submit names of speakers or not.

"I shall be very glad to know your sentiment concerning these requests as soon as possible. Our material for the May Day Bulletin should go to press this week."

Upon the direction of the Bureau, this letter was answered as follows:

"On behalf of the Bureau of Publicity I wish to thank you for your letter of February 18th concerning the 1931 May Day program.

"The Bureau will be very pleased to cooperate with you as it has done in the past in the preparation of one or more newspaper releases concerning May Day.

"In regard to a contact man to represent each county society in this matter, the Publicity Bureau instructed me to write the secretary of each county medical society telling him of your suggestion and stating that the appointment of such a man might be made upon the discretion of each county society.

"The Bureau also instructed me to say that each county society should decide whether or not it wished to appoint such a representative without any influence whatsoever being placed upon it by the State Board of Health.

"Our monthly bulletin to the secretary of each county medical society will include your request and also a statement that the Bureau is of the opinion that each county society, if it so chooses, should appoint a man to cooperate with you in this work."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 11, 1931.

April 6, 1931.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held March 4th read, corrected and approved.

Release, April 4—"What It Costs to Become a Doctor."

The release, "Rabies or Hydrophobia," approved for publication on April 13th.

Radio releases:

March 7—"What It Costs to Become a Doctor."

March 14—"Neuralgia."

March 21—"Trachoma."

March 28—"Superstitions About Health."

April 4—"Measles."

The following report on medical meeting was received:

Feb. 25—Wayne County Federation of Women's Clubs, Cambridge City: "Mental Health."

The following requests for speakers have been received:

May 19—Child Health Conference, Logansport. Speaker obtained.

May 1—Howard County Medical Society, Kokomo. Speaker to be selected.

The following speaking engagement was filled:

March 17—Tri-county Medical Society, Columbus: "Focal Infection."

Letter received from the director of the Division of Infant and Child Hygiene of the Indiana State Board of Health expressing appreciation for "the courtesy of the Bureau of Publicity" in suggesting that contact men be appointed by each county medical society to confer with the director of the Division of Infant and Child Hygiene in working out a 1931 May Day program and promoting the organization of a definite year-round child hygiene program. The Bureau instructed the secretary to notify the director of the Division of Infant and Child Hygiene that any action referred to contact men should first be referred to the Bureau of Publicity for approval in order that there may be unity of action and understanding.

Letters dated March 4th received from Senator Watson stating that the Jones-Cooper maternity bill did not pass Congress. These letters were reviewed by the Bureau.

Several letters received by the Bureau answering requests for information concerning the work of the Bureau. Among these letters was the following:

"I sincerely appreciate your very comprehensive reply to my plea for description of publicity methods, and I feel that this information will be very valuable to our committee. I am in receipt this morning of package of literature from you, including handbooks, for which I thank you."

Another one of these letters from an officer of a dental society, asking the Bureau for information concerning publicity, in part follows:

"Some weeks ago I received your most valuable letter of information on medical publicity. It was very complete and gave me much information upon which to base our report to the (dental) society."

The following letter was received from the Indiana State Library:

"You may have been reading during the past few months the column in the *Indianapolis Star* called 'The Hoosier Listening Post,' written by Mrs. Rabb. If you have, you perhaps have been interested in the diary of Dr. Asahel Clapp, of New Albany. Doctor Clapp, as you doubtless know, seems to have been elected president at the first meeting of the State Medical Association in 1820 when it was organized at Corydon. He was censor in 1823, vice-president in 1850, and president again in 1851, according to the 'Medical History of the State of Indiana,' by Dr. G. W. H. Kemper. The diary has a great many references to early medicine and diseases and is full of comments on the weather. It is interesting both from a scientific point of view and a personal one. Doctor Clapp made a trip to New Yrok and visited hospitals and his comments on these are most interesting.

"The diary belongs to a man in Tennessee who is not connected at all with Doctor Clapp but who is interested in keeping the diary. I am writing to ask if you think the State Medical Association would be sufficiently interested in this diary to pay for the photostating of it, the price of which is $76.00. The diary contains between five and six hundred pages. Our book fund is very small for all of our needs and we dislike very much spending this much money for one item of this nature, and yet we feel that this library should have a copy of the diary for the use of research students in the future. On account of Doctor Clapp's prominence and interest in the Medical Association and medicine in general, it was suggested to me that the State Medical Association might be interested in the proposition and that is why I am writing to you. I shall appreciate any interest which you may take in the matter."

The Bureau authorized the payment of $50.00 to the State Library to help pay for the photostating of the diary in question. A suggestion was made that a release based upon this diary be prepared.

The secretary was instructed to send a copy of the letter received from the Bureau of Legal Medicine and Legislation of the American Medical Association, reprinted in the February 25th minutes of the Bureau, to the editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

The secretary was instructed to send a news item which appeared in the *Indianapolis Star* to the editor of THE

JOURNAL, suggesting that an editorial comment be made concerning it.

The following bills were approved for payment:

Central Press Clipping Service (March)	$ 5.00
Central Press Clipping Service (February)	5.00
The Bailey Office Supply	15.00
A. B. Dick Company	3.50
A. B. Dick Company	2.50
H. W. Wilson Company	.90
M. A. Austin, M.D.	7.14
	$ 39.04

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 14, 1931.

April 14, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., James H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held April 6 read and instructions given that they be corrected for final signature at the next meeting.

The release, "Figures on Rabies," read and approved for publication on April 20.

Radio release, April 11—"Spring Exercise."

The following report on medical meeting was received:

March 17—Tri-county Medical Society, Columbus: "Focal Infections."

Check for $50.00 sent to Indiana State Library for photostating Dr. Asahel Clapp's diary. It is understood that this diary, which is to be kept at the State Library, will be available for use by the Bureau of Publicity or any member of the Indiana State Medical Association. It is understood that any part of this diary may be published in the Indiana State Medical Association JOURNAL.

Better Business Bureau Bulletin of April 9th received by the Bureau. Under the heading, "Trade Commission Order Against Indianapolis Quack Concern Upholds Bureau Contention—Concern Long Out of Business," is printed a statement concerning the Dr. Rodney Madison Laboratories, Inc., and Dr. Rodney Madison, its president, who set up an extensive organization in Indianapolis to sell a magnetic belt as a treatment for almost all types of ailments. The statement in regard to the Madison Laboratories follows:

"The Indianapolis Better Bureau strongly opposed the operation in Indianapolis of the Dr. Rodney Madison Laboratories, Inc., and Dr. Rodney Madison, its president, in the selling of a magnetic belt that was sold for all types of ailments. The Federal Trade Commission, after a widespread investigation and many hearings over a period of some two or three years, has recently issued a cease and desist order which officially confirms the contentions of the Indianapolis Bureau. Local broadcasting stations, WFBM and WKBF, and the Indianapolis *News* and *Times* refused the advertising of this quackery upon information submitted by the Bureau. The 'laboratories,' while getting off to a flying start with magnificently equipped and spacious quarters, with apparently plenty of money back of them, did not get very far in Indianapolis, and soon were forced to discontinue their operations here. The following is a brief outline of the Trade Commission order:

" Representing that he is a descendant of the family of the late President James Madison, that he is a distinguished physician and that a device of his invention has unusual healing qualities, Dr. Rodney Madison, president of Dr. Rodney Madison Laboratories, Inc., Indianapolis, is the recipient of an order from the Federal Trade Commission, dated April 1, 1931.

" Madison is directed to discontinue advertising in connection with the sale of his magnetic device called 'Vitrona,' that, when applied to the human body, it will cure or help cure diseases or has 'any curative or therapeutic value, action or effect whatsoever.'

" The Vitrona consists of a small circular belt containing 600 turns of insulated copper wire and covered with leather or rubber. There is a connection with a 'control' box and with the electric light current in a house. The control box is said to regulate the strength of the magnetic field created by 'Vitrona.'

" That the box does not control the magnet field strength, but is a mere subterfuge to promote the sale of the article, that 'Vitrona' is incapable of transmitting sufficient energy to the human body to be of therapeutic value and that it will not cure by magnetism nor aid in the treatment of diseases, are the chief finds of the Commission.

" It was advertised that the device would cure or benefit such diseases as high blood pressure, rheumatism, neuritis, goiter, constipation, varicose veins, kidney trouble, eczema, nervous disorders, asthma, stomach trouble, insomnia, neuralgia, ulcers, bronchitis, tumors, prostate troubles, and pulmonary tuberculosis.

" Dr. Madison is also ordered to stop the following representations: That the magnetic field of the device magnetizes any part of the body or sets up electric currents therein; that the device is based upon or makes practical application of biological, chemical or electrical discoveries and theories of well-known scientists; that Dr. Rodney Madison is a graduate of a college of medicine and surgery or holds a degree of Doctor of Medicine or is an experienced or skilled physician or that he has had a long, honorable career as physician or that he is a noted inventor or is a descendant of the family of the late President Madison."

Letter received from the Marion County Tuberculosis Association asking for the use of the time that the Bureau of Publicity has on Station WFBM for discussion of Child Health in connection with Child Health Week. The request is made for the time on May 2nd and May 9th. The Bureau granted this request upon the conditions that the talks be sent to the committee for approval and that the name of no physician in active practice be mentioned in connection with these talks.

The following bill was approved for payment:

H. Lieber Company $50.00

(For photostatic copy of Doctor Clapp's diary.)

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 21, 1931.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, APRIL, 1931

There were reported during the month from all sources 7,167 cases of diseases scattered over ninety counties of the state. Two counties, Newton and Warrick, did not report either positive or negative. 311 negative report cards were sent in. Two state institutions, Indiana Reformatory and State Penal Farm, reported thirteen and five cases, respectively.

The prevalence is shown below by name and number of diseases from the urban and rural population:

DISEASE	TOTAL REPORTED	URBAN	RURAL
Tuberculosis	228	145	83
Chickenpox	316	288	28
Measles	4267	3310	957
Scarlet fever	1165	553	612
Smallpox	436	262	174

Typhoid fever	13	7	6
Whooping cough	309	286	23
Diphtheria	107	78	29
Influenza	143	19	124
Pneumonia	45	9	36
Mumps	85	79	6
Poliomyelitis	2	1	1
Meningococcus meningitis	46	31	15
Trachoma	2	0	2
Septic sore throat	1	1	0
Leprosy	1	0	1
Hookworm	1	1	0

Measles is the most prevalent disease reported—3,310 cases the previous month; the corresponding month the preceding year, 399 cases. April is the peak month for measles. March and May are close seconds. If measles go in five-year cycles, no doubt this month it the beginning of the new five-year cycle. The most susceptible ages for measles are six and seven years. So five years ago these children were babies and as a rule babies are not susceptible.

Tuberculosis shows an increase over the previous month when 194 cases were reported. The corresponding month last year there were 142 cases. This is the only disease for which an increase is welcomed because it is a well-known fact that not over ten percent of the cases are reported. Tuberculosis is the only communicable disease that is made reportable by law with a penalty for not so doing, and this is the penalty: Section Six—Any physician, any chief officer having charge of any hospital, dispensary, asylum or other similar private or public institution, any authorized school physician and city, town or county health officer or any owner, agent or any other person violating any provision of this act shall be guilty of a misdemeanor and shall, on conviction thereof, be fined not less than ten dollars ($10) nor more than fifty dollars ($50)."

Scarlet Fever. A decline of the disease is noted—1,347 cases last month; 690 cases same month a year ago. A decrease is normal for the season. This decline will continue until late autumn. This is true of all other communicable diseases except typhoid fever.

Typhoid Fever. The incidence of typhoid fever is the highest this month of the three previous months of the current year, as is thus shown: January, seven; February, six, and March, seven cases, respectively. The contention in the above paragraph will be true as the spring and summer seasons advance.

Smallpox. The peak month of the disease over the last five-year period was March. During this time there were reported in this month 2,943 cases. January was a close second with 2,858 cases. Why? You know.

Diphtheria. A substantial decline is noted—124 cases the previous month; 83 cases the corresponding month the preceding year. The estimated expectancy was 113 cases. The estimated expectancy is based on the experience of the last seven years, including epidemics. This is normal for the season's averages. No doubt the disease is on the decline.

Meningococcus Meningitis. The tragedy of morbidity is meningococcus meningitis on account of the enormous death rate. Thirty-seven cases were reported last month. Same month last year fifty cases. The saving grace of this disease is the great immunity the people have against it. If there was as great a susceptibility to meningitis as there is to measles, it would not be long until the earth would become depopulated.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service,
Indiana State Board of Health.

Total number of deaths in Indiana from all causes in the year 1930 was 39,207, or a death rate of 12.1 per 1,000 of population. The death rate from most of the well-known communicable diseases was the lowest ever recorded in any year. This was true of tuberculosis, with a death rate of 65.9 per 100,000 of population; of typhoid fever, with a death rate of 3.3; of diphtheria, with a death rate of 4.1, and of scarlet fever, with a death rate of 2.1. The year shows also the lowest death rate ever recorded for puerperal septicemia, the rate being 2.9, and for deaths from all puerperal causes the rate being 10.1. The infant mortality rate, based upon the deaths of infants under one year of age for each 1,000 living births, also was the lowest ever recorded, the rate being 57.4. It may be of interest to compare the death rates from these causes for 1930 with rates from the same causes for the year 1920, which are as follows:

	1920	*1930*
Tuberculosis	107.7	65.9
Typhoid fever	9.6	3.3
Diphtheria	12.2	4.1
Scarlet fever	6.6	2.1
Puerperal septicemia	6.2	2.9
All puerperal causes	14.8	10.1
Infant mortality	81.4	57.4

The trend of death rate from all these causes is consistently downward.

On the other hand there is a decided and consistent upward trend in the death rate from a number of important causes.

	1920	*1930*
Cancer	88.4	104.6
Heart disease	148.7	190
Apoplexy	91.9	111.6

Particularly noticeable is the rapid increase in the number of deaths from automobile injuries. In 1920 the total number of deaths from this cause was 363, in 1930 the total was 1,146. There was a marked increase in the number of suicides, the total for 1930 being 649, an increase of 125 over the preceding year.

INDIANA VENEREAL DISEASE CLINICS

New cases (never previously admitted)	389
Total number of old cases and readmissions under treatment during month	5,318
Number of cases discharged as arrested or cured during month	179
Number of cases discontinued treatment without permission	174
Total number of cases remaining under treatment during month	5,354
Number of male syphilitic cases remaining under treatment during month	2,514
Number of female syphilitic cases remaining under treatment during month	1,604
Total number of syphilitic cases remaining under treatment during month	4,118
Total number of treatments during month	10,992
Total number of visits to clinic for treatment, examination or advice	15,744

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	253
Gonorrhea	105
Chancroid	1

During the month two hundred eighty-nine pamphlets were distributed. One hundred ninety-six were mailed upon receipt of twenty-eight requests and ninety-three were sent to ten people on our own initiative.

NORTHERN TRI-STATE MEDICAL ASSOCIATION

The Northern Tri-State Medical Association held its fifty-eighth annual meeting at Ann Arbor, Michigan, Tuesday, April 14, 1931. The morning program consisted of clinics.

Dr. Cyrus C. Sturgis, the professor of medicine in the University of Michigan, presented a series of cases demonstrating the use of ventriculun in pernicious anemia, emphasizing the fact that reason for its failure was often due to improperly diagnosed cases.

Dr. John Alexander, professor of clinical surgery in the University of Michigan, showed numerous types of cases of thoracic disease, their complications and the proper methods for dealing with the same. He advised that the infusions accompanying tuberculous pleurisy should not be drained openly, as a permanent sinus is apt to result, but if necessary aspirate sparingly.

Dr. Frank Wilson, associate professor of medicine in the University of Michigan, presented a most interesting series of cases dealing with the different types of heart disease. He had several patients with a patent foramen ovale.

In the afternoon the first speaker was Dr. Arnold Jackson, of Madison, Wisconsin, who illustrated with slides the different phases and manifestations of disease of the thyroid gland, and their treatment. His lecture dealt with the usual conditions which the average physician has to meet and was very helpful.

Dr. L. J. Karnosh, of Cleveland, presented a paper on the neurology of the emotions, using slides and diagrams and pictures to illustrate their origin and the results of the same. His slides and lecture demonstrating the various types of insanity were instructive and amusing to the listener.

Dr. Norman F. Miller, professor of obstetrics in the University of Michigan, discussed the various types of gonorrheal infection in the female by the use of slides. He stated that the acute gonorrheal pus tube should not be removed, and stated that the abdomen should only be opened in those cases where there was pus in the posterior cul de sac, an abscess in the broad ligament, or a complicated appendix.

Dr. E. B. Gillette, of Toledo, had an excellent and highly instructive paper on carcinoma of the bladder. He stated that about fifty perecnt of all primary malignancies of the bladder are located about the ureteral orifices or in the trigone, while the other fifty percent are found in the dome and on the lateral and posterior wall. Diagnosis is made by cystoscopic observation and biopsy. It is his opinion that all tumors of the dome or lateral wall should be widely excised, followed with bladder closure and a suprapubic drain. If the growth is located in the trigone or on the posterior wall, he advises electro-coagulation. Biopsy all tumors of the bladder. Papillomata may recur as true malignancies. In the treatment he uses radium, electro-coagulation and surgery, depending on the type of case.

Dr. Plynn Morse, pathologist of the Harper Hospital in Detroit, discussed the causes of sudden deaths. The brain lesions such as tumor and hemorrhage, the various poisonous gases and poisons taken by mouth, pulmonary embolism and interference with the bundle of His, and where the question was in doubt as to the death, to insist on a postmortem examination.

Dr. W. Wayne Babcock, professor of surgery in the Temple University at Philadelphia, gave a very instructive talk on blood vascular surgery. He dealt at length on the various treatments of aneurysms, the hydro-dynamics of the blood vessel, and gave the results of three cases in which he anastomosed the internal carotid to the internal jugular as an aid to pulmonary tuberculosis, stating that it lowered respiration, thus giving the lungs more rest, and supplied it with a better quality of blood. He also advised this operation in certain types of aneurysms of the arch of the aorta, stating that it reduced arterial tension.

Dr. George Crile, of Cleveland, presented a series of cases relative to severing the adrenal nerves in cases of Reynaud's disease, neuro-circulatory asthenia and in cases following a total thyroidectomy where the patient failed to obtain beneficial results from the operation. Illustrated and demonstrated the principle and said he believed it to be an advance in medical science.

Dr. Norris W. Gillette, of Toledo, was the retiring president. Dr. C. D. Camp, of Ann Arbor, Michigan, was elected president, Dr. H. M. Senseny, of Fort Wayne, Indiana, vice-president; Dr. Edward B. Pedlow, of Lima, Ohio, secretary; Dr. G. O. Larson, of LaPorte, Indiana, treasurer.

The next annual meeting will be held in the early part of April, 1932, at Toledo, Ohio.

EDWARD B. PEDLOW, M.D.,
Secretary.

FORT WAYNE MEDICAL SOCIETY

The Fort Wayne Medical Society held its regular meeting January 27, 1931, at 8:00 p. m. in the Wayne Pharmacal Building.

Minutes of the previous meeting read and approved.

Doctor Duemling made a second presentation of a severe case of psoriasis which had cleared up greatly since seen the last time. Ten percent chrysorobin and three percent salicylic had been used on the body and ten percent oil of cade on the scalp. Discussed by Doctor Hall.

Doctor Taylor presented a fetus which apparently had been strangulated *in utero* some time before abortion took place. The cord was looped about the neck in slip-knot fashion. Discussed by Doctors Wallace, Duemling, Hall, A. Wyatt, Schafer and Worley.

Doctor Harshman showed the stained smear of spinal fluid presenting the pneumococcus. Discussed by Doctor Weaver.

Doctor Carlo reported a case of meningitis in an eight-month-old child, with alternating bulging and depressed fontanel manifestations. The spinal fluid in this case showed the influenzal bacillus on direct smear. Discussed by Doctor Dancer.

The paper of the evening was presented by Dr. D. D. Johnston, who has made considerable observations on blood pressure readings and pulse findings in his work on the examination of aviators, 171 men of normal average health, varying in age from sixteen to forty-eight years. Discussion was also made on the Schneiders test, which is based upon reclining pulse reading, standing pulse reading, the difference between these two, the rate after standard exercise, and the length of time it takes for the pulse to return to normal after exercise, the difference between the standing and reclining systolic blood pressures, each factor being weighed on a point scale system.

Method of Making Observation: The pulse is counted for one-half minute and the systolic and diastolic blood pressure taken with the man standing and findings recorded. He is then instructed to hop on his right foot fifty times and at the end of this exercising the pulse is immediately counted for one-half minute, and in the second one-half minute the systolic and diastolic blood pressures are again taken and findings recorded. The man is then told to stand still for one more minute and the pulse is again taken at the end of that minute, or in other words at the first one-half minute of the third minute after exercise.

It was found that the average pulse standing was eighty-seven, immediately after exercise 105, and two minutes after exercise eighty-eight. The average pulse increase after exercise was eighteen and two minutes after exercise it had returned to practically the original standing rate. It is my opinion that with a larger number of men to draw statistics from it would be found that the pulse rate will return to exactly the same rate as the original standing rate. This has been observed to be the case in men in the better physical condition. The average blood pressure readings were found to be as follows: Standing—systolic 123, diastolic 83, an average pulse pressure being 50 or an increase in pulse pressure of 10 points above the standing pulse pressure.

Blood pressure and pulse recordings were made on five women, four single and one married, with average age

of twenty-two. Pulse standing 94, after exercise 114 and two minutes after exercise 98. Pulse increase after exercise being 20, or two points higher than the men, and the two-minute-after-exercise reading being four points higher in comparison with the men, with one-point increase.

The blood pressure readings were found to be distinctly lower than in the men, and are as follows: Standing—systolic 113, diastolic 83, with a pulse pressure of 30 as compared with a pulse pressure of 40 in the men. After exercise, systolic 123, diastolic 77, with a pulse pressure of 46 lower than the men by 4 points. It will be noticed that although the blood pressure readings are lower than the men the pulse pressures remain practically the same and if a larger number of readings could be had on women it is quite probable that the pulse pressure would be found to correspond with those of the men even though the average blood pressure readings are lower. With the small number of readings made on women it is hardly fair to compare them with those of the men; however, this has been done, and it can be taken for what it is worth.

The secretary reported the correspondence received from legislators and from the state society secretary on proposed legislation.

Motion was made, seconded, passed, that the secretary write Representative Hogg for more information concerning his stand on the Jones-Cooper bill.

Motions were made, seconded and passed that matters concerning school tax legislation and concerning the Grim bill be referred to the legislative committee for their consideration and report at next meeting.

Thirty members, one guest present.

The Fort Wayne Medical Society held its regular meeting at the Methodist Hospital at 8:15 p. m. February 3, 1931.

Dr. D. F. Cameron discussed the subject of spinal anesthesia, comparing the use of novocain solutions containing alcohol and alcohol and novocain solutions made up with distilled water. The specific gravities being different called for the patients to be put in opposite positions. He favors the distilled water media as the patient can be given the spinal puncture in the sitting posture, a much easier technique.

Further discussion was directed toward the findings in 140 cases of spinal anesthesia; vomiting in fifty percent, headache in fifty percent, increase in bowel tonus and increased peristalsis, completeness of the anesthesia, and the drop in blood pressure. The speaker favors its use only in cases presenting good risk generally.

Discussion was also made as to the preoperative use of nine to twelve grains of sodium amytal for gas or ether anesthetics. This plus morphine and atropine are given orally some three hours preoperative and the patient experiences considerable amnesia for all events of the day. Less general anesthetic is needed although the induction is slower. The patient comes out of the anesthesia less rapidly and does require more nursing care for the twenty-four hours. Sodium amytal has not proved efficient in local anesthesia combinations. Discussed by Doctors Catlett, Bruggeman, Blosser and Weaver.

Doctors Johnston and Skobba presented two cases of empyema in young children.

Doctor Catlett reported a case of avulsion of the internal semi-lunar cartilage with locked knee joint. Discussed by Doctors Buckner, Truelove and Rawles.

The secretary read the letters which the legislative committee had prepared following their instructions at the last meeting. The letters to the state legislators indicated our favoring the Grim bill and opposing the Jones-Lindley and Wimmer bills.

Thirty-five members, three guests present. Adjournment to the dining-room.

The Fort Wayne Medical Society held its regular meeting February 10, 1931, at 8:15 p. m. at the Wayne Pharmacal Building.

The minutes of the two previous meetings were read and accepted.

A clinical case of Charcot's disease of the os calcis in a male was presented by Doctors Johnston and VanBuskirk. X-ray showed marked destruction of bone and there was considerable swelling with very small amount of pain.

The paper of the evening was given by Dr. Emor L. Cartwright on "Some Phases of Proctology."

The essayist had numerous photographs, posters, and eighty-seven lantern slides demonstrating the points referred to. Discussion by Drs. N. L. Salon, Worley, Johnston, Hane, VanBuskirk, Bruggeman and Rothschild.

The applications of Doctors Titus, Draper, Moravec and Emme, having been sanctioned by the entire Board of Censors, were presented for vote. Doctor Bruggeman's motion was seconded and passed that these men be elected to membership and a unanimouse vote was cast.

The secretary presented the following bills: Postage, $3; telephone girl, $7; flowers, $10; notices, $39.10, which bills by proper motion were allowed.

Twenty-six members and six guests were present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building February 17, 1931, at 8:15 p. m.

The minutes of the previous meeting were read and accepted.

Doctor Catlett showed the specimen of a large cystic ovary which had a twisted pedicle.

Doctor Edlavitch reported the case of a jaundiced male with a stone in the common duct. Patient also had a focal erysipelas. Discussed by Doctor Wright.

The paper of the evening was presented by Dr. W. C. Wright on the subject, "The Infected Prostate."

Doctor Rawles read resolutions which the legislative committee drafted concerning the action of the Fort Wayne Chamber of Commerce concerning House Bill 219.

"Insofar as the Chamber of Commerce of Fort Wayne has taken steps to block the passage of House Bill 219, the Legislative Committee of the Fort Wayne Medical Society (the Medical Society of Allen County) offers the following resolutions:

"First, That the Fort Wayne Medical Society is going on record protesting the action of the Fort Wayne Chamber of Commerce in regard to H. B. 219.

"Second, The Legislative Committee of the Fort Wayne Chamber of Commerce never consulted the members of Fort Wayne Medical Society Legislative Committee in regard to the contents, or the results, or its position in regard to H. B. 219.

"Third, Insofar as ninety percent of bills contracted in automobile accidents never are paid to surgeons, hospitals or ambulances for services rendered at that time, the medical profession feels that it needs some protection against this class of work in regard to the collection of fees for services rendered.

"Fourth, The members of the Fort Wayne Medical Society resent the unjust attack made by the Fort Wayne Chamber of Commerce upon the physicians and hospitals of the state of Indiana.

"Fifth, Inasmuch as several members of the Fort Wayne Medical Society are also members of the Fort Wayne Chamber of Commerce, this action is considered as a direct insult to those members of the medical profession who were not consulted by the Legislative Committee of the Chamber of Commerce."

(Signed by the Committee)

Lyman T. Rawles, Chairman,
I. E. Morris,
Maurice R. Lohman.

There was a second to Doctor Bruggeman's motion that the resolutions be adopted. Doctor VanBuskirk moved that the motion be amended to the effect that a copy of the resolutions be sent to the Board of Directors of the Chamber of Commerce, to the State Legislators and to

the Legislative Committee of the State Society. Amendment seconded and passed. Motion as amended carried.

Doctor Sparks moved that a committee be appointed to interview the Chamber of Commerce in addition to the resolutions. Motion seconded and passed. Chair appointed Doctors Rawles, Sparks and Bruggeman to serve on this committee.

Twenty-eight members and three guests present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building February 24, 1931, at 8:15 p. m.

Minutes of the previous meeting were read and accepted.

Dr. H. J. Miller reported a case of acute pellagra in a female.

Doctor Conley reviewed the subject of chancroids and reported two cases with mixed sores. Discussion by Doctors Rhamy, Budd VanSweringen, Zehr, Sparks and Rothschild.

Doctor King reported some interesting autopsy findings observed in his work as deputy coroner.

The committee appointed to interview the Chamber of Commerce relative to their stand in the state legislature concerning the Grimm bill reported a satisfactory conference and that the Chamber of Commerce had made satisfactory corrections at the legislative assembly.

Doctor Weaver's motion was seconded and passed that the report of the committee be adopted and filed.

Doctor Bruggeman's motion was seconded and passed that the treasurer allow $14.00 to cover the state dues of Doctors McCaskey and Porter, who are honorary members.

Twenty-eight members and three guests present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Shrine club rooms at 6:30 p. m. March 3, 1931.

The minutes of the previous meeting were not read.

The speaker of the evening was Dr. A. H. Curtis, of Northwestern University.

A rather technical paper was presented on the subject of "Surgical Treatment of Lesions Incident to Childbirth." A lantern slide demonstration was given on the repair and surgical care of lacerations, cystocele, rectocele, prolapsed uteri and chronic endo-cervicitis.

The paper was discussed by several local members and guests who were present from the surrounding towns.

Sixty members and five guests were present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building March 10, 1931, at 8:15 p. m.

The minutes of the previous meeting were read and accepted.

The meeting was in charge of Dr. S. P. Hoffman, who presented several interesting cases.

Doctor Schafer made a report concerning the activity of the Hospital Home Service and the Dispensary Clinic. Motion was made that this report be accepted and filed. Motion seconded and passed.

Matter from state society concerning a summer educational course referred to Legislative Committee.

Several bills were presented and allowed.

The chair appointed Doctors Short, Duemling and Carlo as a Resolutions Committee concerning the death of Dr. L. B. Schneider. Doctor Schafer moved that the society go to the funeral in a body, and that the secretary be instructed to notify the members by telephone. Motion seconded and passed.

Twenty-eight members and three guests were present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the St. Joseph Hospital March 17, 1931, at 8:15 p. m.

The minutes of the previous meeting were read and accepted.

Doctor Bruggeman presented two cases: first, a male twenty-six years of age who for the past five years had had recurrent painless, shotty masses in the left elbow. Case considered a true neoplasm bordering on malignancy, strictly congenital in origin. Diagnosis: Chrondomitosis. Repeated recurrences and removals in evidence yet joint has good function. Second case, male who had had a radical resection of the genital organs for carcinoma of the penis. There had been successful transplantation of the urethra in the perineum. Discussed by Doctors Morris, Worley, Hall and Sparks.

Doctors Sparks and Parker presented the case of a male thirty-one years of age who had a markedly distended but painless bladder. This condition was subsequent to a gonorrhea and a prostatic abscess, but the bladder condition was probably neurogenic. Discussed by Doctor Wright.

Dr. W. B. Rice reported the case of a child three years of age who had had a traumatic collapse of the lung with recovery. Doctors Bruggeman and Worley discussed the case.

Dr. Arthur F. Hall, Jr., reported a case of a male forty-five years of age who had had a neurogenic bladder, which condition improved after tryparsamide treatment. This treatment was complicated by visionary disturbances and was considered one of tryparsamide poisoning. This improved rather promptly under sodium thio-sulphate but the improvement was short lived. Second injection did little good. In the course of time the patient's vision is somewhat improved. Discussed by Doctor Duemling.

Dr. L. T. Rawles showed the specimen of a rapidly growing fibroid uterus with a four or five months' pregnancy. Case discussed by Doctors Hall, Wright, Johnston, Weaver, Carlo and Bruggeman.

Dr. Harry Salon reported the case of a pregnancy complicated by bowel obstruction. The obstruction was caused by an adhesion of the ileum to a three-year-old right rectus incision scar. Discussed by Doctors Ray, Rothschild, Bruggeman and Berghoff.

Doctor Sparks briefly discussed two x-ray pictures, one that of a dilated ureter in a female and the other a diverticulum of the bladder in a male.

Doctor Velkoff briefly discussed a freakish un-united fracture of the humerus and a loculated stomach which retained its barium for as much as two weeks.

Doctor Hall made a motion that the society go on record as being opposed to any special listing of physicians in the telephone directory unless such listing be confined to doctors of medicine. Motion seconded. Doctor Bruggeman moved to amend the motion striking out everything after the word "listing." Amendment seconded and passed. Motion as amended passed.

Doctor Steele moved that either the secretary or a committee be appointed to convey this information to the telephone company. Motion seconded and passed whereupon the chair appointed Doctors Harshman, Steele and Hall to contact the telephone company.

Forty members and five guests present. Refreshments served after meeting. Adjournment.

The Fort Wayne Medical Society held its regular weekly meeting at the Wayne Pharmacal Building March 24, 1931, at 8:15 p. m.

Minutes of previous meeting read and approved.

Rev. Rocca substituted for Mr. A. F. Hall, Sr., in reporting a resume' of the work done by the Allen County Emergency Unemployment Committee under date of March 12, 1931. A detail of this report is filed with the minutes and shows 3,932 men and 537 women have registered. There has been an average expenditure of $28,000 per month and there is a balance of $22,042.06, which will carry the work to April 1, 1931.

During the course of the meeting Dr. N. L. Salon moved that the society give this committee a vote of thanks for making this report and also a vote of confidence and support in their further work. Motion seconded and passed.

The program of the evening consisted of an interesting group of case reports by Dr. B. S. Cornell.

Discussed by Doctors Edlavitch, Cartwright, Sparks, Rothschild, Weaver and Conley.

The committee appointed to wait on the telephone company reported that they had carried out the message they were instructed to give; that henceforth only licensed M.D.'s will be listed under the heading of physicians.

Doctor Rawles moved that the report be accepted and the committee be discharged. Motion seconded and passed.

The president announced the forthcoming Child Welfare Conference in Allen county.

Forty members present. Adjournment.

The Fort Wayne Medical Society held its regular meeting at the General Electric Company plant March 31, 1931, at 6:15 p. m.

The society was bounteously entertained by a banquet, Mr. E. A. Barnes acting as host.

A paper on "Estimation of Permanent Disability in Industrial Accidents" was presented by Doctor Garton, and will be published in THE JOURNAL.

Discussion was opened by Doctor Eberly and continued by Doctors Bruggeman, Lohman, Rothschild, Wallace and Mr. Barnes.

Fifty-six members and four guests present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building April 7, 1931, at 8:15 p. m.

Dr. A. R. Barnes, of the Mayo Clinic, presented a paper on the subject of coronary disease.

The speaker gave a discussion of recent advances in our knowledge of the anatomy of the coronary circulation in its relation to disease and injury.

Stress was laid on the diagnostic features of angina pectoris with special attention to some efforts in thought about this condition.

The values of the electro-cardiogram in making a diagnosis of myocardial infarction were emphasized. Likewise, the limitations of this instrument in ordinary angina was considered.

Attention was given to the differential diagnosis between attacks of coronary occlusion and certain surgical conditions in the abdomen.

Various lantern slides were given showing the anatomy of the heart circulation to be somewhat different from that previously taught. Other slides were given of electrocardiograms from various electro-cardiographic findings.

Paper discussed by Doctors Weaver, Rhamy, Bruggeman and others.

Fifty members and five guests present.

Adjournment.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building April 21, 1931, at 8:15 p. m.

The minutes of the previous meeting were read and approved.

Doctor Harshman reported a case of acute hemorrhagic pancreatitis.

The paper of the evening was presented by Dr. Emmet Keating, of Chicago, on the subject of the complete physical examination, which was given in detail. The essayist considered the possibility of full-time men on hospital staffs to form a consulting group for making complete examinations for the general practitioner. Paper discussed by Doctors Harshman, Worley, Murdock, Wallace, Bulson and Rothschild.

The applications of Dr. A. H. Duemling and Dr. O. Kidder were considered and motion was made and carried to the effect that the secretary cast a unanimous vote for their membership into the society.

Thirty-five members, three guests present.

Adjournment.

ST. JOSEPH COUNTY MEDICAL SOCIETY

South Bend, Indiana.

The St. Joseph County Medical Society met in the Public Library Tuesday, March 14, 1931, with Dr. Marcus Lyon, president, in the chair.

Doctor Sarber, of Argos, and Doctor Spaulding, of Mishawaka, were elected unanimously to membership.

Dr. H. D. Pyle reported a case of acrodynia in vegetative endocarditis and bilateral gangrene of the feet. Doctor Giordano, who performed the autopsy on the above case, showed a series of microscopic slides on the screen. Because of the unusualness of the case and its masterful presentation an abstract by Doctor Pyle is given as follows:

M. S., white, female, age two years seven months. Entered the hospital February 10, 1930, because of a "breaking out, diarrhea and infection in the toes." The family and past history are entirely negative.

The present illness began the first week in June of 1930, with temperature of 100 degrees, malaise, epiphora and irritability. The entire family had the same complaint at this time. The duration was one week and then the patient seemed well until the last week in July, when she became irritable, developed fine, papular eruption of abdomen, anorexia and began to lose weight. She was very nervous, tossing and turning constantly, was unable to sleep at night and assumed the knee-chest position with her face buried in the pillow. About September 1st developed profuse, irritating perspiration which has continued ever since. The first of October, 1930, eruption became the vesicular with ulceration of skin following rupture of vesicles. The hands and feet became red, swollen, desquamated and itched intolerably. The teeth and hair began coming out and the patient lost in all nine teeth in the following four months. In November, 1930, developed loose, watery, green stools, ten to fifteen in number a day, which did not contain blood or mucus. The patient remained about the same until January 1st, when she seemed to improve generally. February 6, 1931, the nail was lost from the third left toe, and two days later the toe suddenly turned black. On admission, physical examination revealed an undernourished, pale, extremely irritable, miserable child, having appearance of having been ill for a long time. Temperature 103.6 degrees. There was a muco-purulent nasal discharge, moderately injected tonsils and post-pharyngeal wall. The gums were irregular and nine teeth were absent. There were scattered, coarse, moist rales heard over both lungs anteriorly and posteriorly. There were no areas of dullness or bronchial breathing; the heart was not enlarged, the rate was rapid with regular rhythm and there was a soft systolic murmur heard best at apex but not transmitted outside heart orders and the pulmonic second sound was not accentuated. About the rectum there were several small, crater-like ulcerations which were bleeding slightly. The feet were swollen, red and desquamating in areas, with maceration of the toes and the plantar aspect of the right foot. The distal phalanx of the third toe of the left foot was gangrenous and partly sloughed away. The skin of the body generally was dry and desquamating but macerated and perspiring in the inguinal and axillary regions. Over the cheeks and abdomen there was a fine, red, maculo-papular eruption with many excoriations from scratching.

Laboratory Data: X-rays of chest and lower extremities revealed only slight infiltration of the upper lobe of right lung. The urine contained three-plus albumin and one-plus pus.

Blood Studies: Red blood corpuscles, 3,900,000; hemoglobin, 77 percent—11.62 grams; white blood corpuscles, 28,800; polys, 82 percent; small lymphocytes, 3 percent; large lymphocytes, 12 percent; monocytes, 3 percent; red blood cells, normal. Blood Wassermann negative; blood culture obtained streptococcus hemolyticus. Stool examinations were negative. Spinal fluid examination: Cell count, 10 per centimeter; globulin, negative; sugar 60 mgms.; culture and smear negative.

Course: During the first six days in the hospital the patient improved a great deal, generally, with the temperature gradually falling to 100 degrees, less irritability, appetite improved and was bright and talkative. The gangrene, however, continued to spread rapidly upward, involving the dorsum of left foot. It also began in the right foot a few days after entry and spread rapidly, involving entire member to ankle at the time of death. During the last eight days prior to death the temperature was septic, ranging from normal to 105.6 degrees, there was profound, increasing toxemia with death occurring on the fifteenth hospital day.

Postmortem Examination: Few areas of atelectasis. Scattered through epicardium, there are small areas of hemorrhage. There is a vegetation over mitral valve which is spherical and measures one centimeter in diameter. The heart weighs sixty grams. Scattered throughout spleen are numerous small infarcts. There were many small areas of hemorrhagic infarcts.

The brain showed no gross abnormalities. Microscopic examination of the brain revealed scattered throughout cerebral cortex many focal areas of necrosis with leukocytic infiltration and areas of hemorrhages. Similar areas were found in medulla and spinal cord. Root ganglion also shows an inflammatory reaction. Scattered throughout myocardium, spleen and kidneys are focal abscesses.

A section taken from the region of the foot reveals gangrene in the skin. The blood vessels in the dermis show definite changes in the intima and media.

The paper of the evening, "Acute Suppuration of the Nasal Sinuses," was read by Dr. E. E. Linn, who touched the following points:

1. Reviewed the anatomy of the sinuses briefly.
2. Gave the etiological bacteriology of sinusitis.
3. Enumerated the common symptoms and signs of sinusitis and their consideration in diagnosing the involved sinus.
4. Gave the principles of treatment followed in caring for infection in each of the various sinuses.
5. Mentioned but did not discuss the more common complications arising from trouble in the sinuses.
6. Closed by urging conservative rather than radical procedures in the treatment of acute suppurative sinusitis.

The paper was discussed by Doctors Savery, Cassidy, Lent, Frash, Giordano and Sandock.

The St. Joseph County Medical Society met in the Public Library Tuesday, March 31st, with Dr. Marcus Lyon presiding.

The application of Dr. Marion W. Hillman for membership was referred to the Board of Censors.

The paper of the evening was given by Dr. I. Sandock on "Perforated Appendicitis; Study of Data Obtained from Various Hospitals."

Doctor Sandock sent out questionnaires to well-known hospitals of the United States asking for information as to the methods of treatment, conservative or radical, used and the result in each case. From the replies he tabulated a most interesting chart. It was regretted that many questionnaires were not answered. It is hoped that Doctor Sandock will continue his investigations and give to the JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION a more complete tabulation with his most interesting deductions. The paper was discussed by Doctors Terry, Greene, Birmingham, Myers, Marcus Lyon, of South Bend, and Doctor Eley, of Plymouth.

St. Joseph County Medical Society met in the Public Library Tuesday, April 7, 1931, with President Lyon in the chair.

Dr. Donald Grillo's application for membership was referred to the Board of Censors. The paper of the evening was by Dr. H. D. Pyle on "The Convulsions of Infancy in Childhood."

Doctor Pyle defined convulsions and gave the several theories as to their causation. The causes fall into five main groups—organic, toxic, metabolic or chemical, idiopathic and reflex. In the newborn the convulsions are more frequently organic due to greater opportunity for injuries to the head with associated intercranial hemorrhage or edema or prevalence of congenital defects. Toxic causes of convulsions may be due to substances introduced into or elaborated from within the body as alcohol, atropine, strychnine, lead poisoning from without and from within, toxins of pneumonia, acute otitis media, scarlet fever, pyelitis, whooping cough, gastro-intestinal disorders, uremia, or the acute cerebral edema which complicates acute glomerular nephritis.

The majority of convulsions of infancy are metabolic or chemical in origin, known clinically as tetany. The gross chemical finding is a lowering of the blood calcium. Idiopathic convulsions occur only in true epilepsy. Reflex causes of convulsions generally can be placed upon a definite pathological basis if careful search is made. Doctor Pyle took up the symptoms and proper treatment of each type of convulsion but placed the most stress on the spasmophilic convulsion or tetany as manifested by convulsions, laryngismus stridulus, carpopedal spasm, and breath-holding spells. He called attention to the diminution of calcium salts and tetany usually associated with the healing of rickets, and the possibility of excess of phosphates. Doctor Pyle gives the symptoms, signs and reflexes by which tetany can be differentiated most easily from other forms of convulsions and stresses the treatment for the immediate control of the convulsion followed by the proper regimen for the prevention of other convulsions.

The paper was discussed by Doctors Knode, McMeel, Bickel and Savery.

MARTHA BREWER LYON, M.D.,
Asst. Secretary and Treasurer.

LAPORTE COUNTY MEDICAL SOCIETY

April 17, 1931.

I cannot refrain from growing a little verbose in telling you of the fine meeting held last night at the Spaulding Hotel in Michigan City. We had the largest attendance in the history of our society. Of our forty-six paid-up members, thirty-six were present, exclusive of one honorary and life member. In addition we had sixty-three guests from various other county societies of Indiana, Michigan and Illinois representing fourteen different cities. One hundred were in attendance at the meeting, seventy-nine attending the dinner.

This meeting was in honor of one of our honorary and life members, Dr. A. G. Tillotson, of Michigan City, whose eighty-fourth birthday coincided with the date of the meeting. Doctor Tillotson, who graduated from the old Bennett Medical College in Chicago in 1867, is not in active practice, although he occasionally prescribes for old patients, so that we may say he has practiced medicine in this city for sixty-four years. During his lifetime he has witnessed many of the major advances in medicine and recalls the day of antiseptic surgery as against the modern aseptic surgery. He also recalls the first gall-bladder drainage in the history of the world, done by Doctor Bobbs, of Indianapolis, who accidentally cut into the gall bladder while doing a laparotomy. Dr. H. H. Martin, of LaPorte, briefly reviewed the changes in medicine that have taken place in Doctor Tillotson's lifetime.

Dr. Gilbert Fitz-Patrick, of Chicago, was the guest speaker, his subject being "Cancer." He also showed the

"Canti-Reel." This was an excellent program and I feel well repaid for any effort on my part in getting out a good attendance.

Yours very truly,
J. R. PHILLIPS, M.D.

PORTER COUNTY MEDICAL SOCIETY

The Porter County Medical Society held a meeting March 31st at the residence of Dr. E. H. Powell, and the members were Doctor Powell's guests for dinner. Doctor Powell read a paper on embolism and also on abdominal injuries caused by blunt objects. In the former he advised telling the patients or their families of the possibility in fractures and herniotomies; in the latter the need of careful observation of seemingly trivial accidents, the appalling mortality in delayed operations, while prompt exploratory operations give results that compare favorably with other abdominal operations of similar magnitude.

The censors having acted favorably on the applications of Dr. W. M. Parkinson, and Dr. J. W. Dale, both of Chesterton, they were elected to membership.

Respectfully submitted,
G. R. DOUGLAS, M.D.,
Secretary.

CORRESPONDENCE

PHYSICAL THERAPEUTICS

Indianapolis, April 8, 1931.

Editor THE JOURNAL:

Your pungent editorial comments upon abuses of physical measures by laymen, pseudopractitioners and even in a few instances by physicians have attracted much favorable attention. There is no question but what the abuses to which you refer are prevalent and that they are rapidly becoming worse.

Witness the following excerpts from the "Personal Advertising Column" of a great metropolitan daily newspaper of current issue (headlines only are given): "The Nation's Remedy," "Why Suffer with Piles?", "Massage-Medicated Bath," "Psycho-palmist," "Reclining Vapor Baths," "Neuritis Cured—Positively by M. D.," "Try Massage and Alcohol Rub for That Tired Feeling," "Electreat-Violet Ray," "Baths-electric," "Massage Baths-Violet and Sun Ray," "Electric Baths, Rheumatism, Nerves," etc.

No doubt some symptomatic relief must be given by these agencies even in nonmedical hands, or these various "health dispensers" could not continue in business and pay for advertising. Neither could department stores make a business of selling various types of heating devices to the laity on the installment plan, as well as various other mechanical gadgets, colonic sprays, "strong arm developers," and other devices for self-medication and self-administration—recommended as being "good for what ails you."

However, as physicians we all know there is a vast difference between symptomatic relief and real scientific medical service. The latter is based upon accurate diagnosis, which is possible only in the hands of the well-trained medical man, and requires more than a superficial "laying on of the hands." Diagnosis is often difficult even where the most painstaking examination has been made by an expert diagnostician, but in every case the expenditure of time and energy is well worth while in the elimination of false premises and illogical therapeutic procedures.

It may be true that as physicians we are overspecializing, overhospitalizing and undertreating by simpler methods that are applicable in the office and in the home. It is undoubtedly a fact that a greater number of our general practitioners as well as our specialists are showing an increasing interest in the use of physical agencies as an important adjunct in their medical and surgical practice. These men are sincerely endeavoring to improve the quality of their medical service and to keep their patients out of the hands of pseudomedical practitioners, charlatans and medical quacks. On the other hand, because of their inability to comprehend the highly technical factors associated with the construction and physiological effects of the various physical agents, many instances are occurring in which the physician has been victimized. In all too many cases he has been loaded up with apparatus which he does not need or which he has neither the time nor space in which to operate efficiently. Lacking technical knowledge himself, in all too many instances, he has employed a nonmedical technician to operate the apparatus. Skilled medical supervision not being available, the apparatus is often misused and failures necessarily result.

In analyzing the cause of the abuses and misuses of physical agents we may sum it all up in the following phrases: crass commercialism, culpable credulity and ignorance. The greatest cause is the latter—ignorance—and the one which the honest physician can correct the best. He should know that in every medical center there is at least one well-trained medical man, a member of his own county medical society, who is giving special attention to this phase of medical work. He should consult with him on all such matters, with the same freedom with which he consults with specialists in other fields of medicine and surgery. The county secretary might well follow the recommendations of the Council on Physical Therapy of the American Medical Association and provide a place on the program, at suitable intervals, for a paper or a course of instruction in the fundamental principles and practice of physical therapeutics. Curriculum makers should follow the recommendations of the Council, in provision for instruction in the premedical course—for biological as well as mathematical physics. Hospital authorities should adhere to the recommendations of the American Hospital Association and of the American College of Surgeons and should establish a well-equipped physical therapy department under *trained medical supervision.* In too many instances the department of physical therapeutics is treated as a step-child. It is given unsuitable space in the basement and placed under a roentgenologist who is all too often too busy with his own specialty to give it the proper attention which it requires to operate successfully. If a well-trained medical physical therapist were available to pass upon questions as to purchase of apparatus, and its technical application, hospitals could operate much more efficiently and economically. Such instances as the expensive installation of a special glass for the transmission of "less than half of the available ultraviolet of sunlight" would not be made in those zones in which scientific investigation has shown that for the greater part of the year the available ultraviolet is therapeutically practically nil. In many instances, to my personal knowledge, members of the staff have requested treatment with physical agencies which were dangerous or inadequate. In other instances the indicated agency has been requested, but the technician did not know how to apply it, and there was no one to whom to go for immediate instruction in the proper technic. In other instances apparatus has been purchased which was not needed, or entirely inadequate, because of lack of technical knowledge on the part of the purchasing committee. Expensive carbon arc installations have been made, where a relatively less expensive and more efficient use of other generators should have been advised.

Physicians should know that the Council on Physical Therapy is prepared to answer authoritatively the many problems which arise in their practice. The Council leans heavily upon technical advice from the United States Bureau of Standards and from a corps of physicists and physicians who are in a position to speak authoritatively. The Council now gives a course of instruction in physical therapeutics at the national annual meeting. Several

special societies exist the membership of which is limited to members of the American Medical Association. The practicing physician can depend upon the integrity of information which emanates from such sources.

The vast majority of physicians are sincere in their efforts to prevent, alleviate or cure disease. They are open-minded about the use of physical agents when utilized by trustworthy hands. They have not been as yet fully informed as to the prevalence of the abuses to which we have referred, or of the real dangers which are involved in self-administration. They know little about physics and less about the physiological effects, and still less about the limitations and contraindications. This information is now becoming available to all. No longer is it necessary for their patients to consult questionable or unethical sources of information and advice. We are all beginning to realize that in physical therapeutics as in every other phase of medical work "he who treats himself has a fool for a doctor," and that there is absolutely "no substitute for skill and experience."

Very sincerely yours,

EDWIN N. KIME, M.D.

BOOK REVIEWS

Books received since April 1, 1931:

DIAGNOSTIC METHODS AND INTERPRETATIONS IN INTERNAL MEDICINE. By Samuel A. Loewenberg, M.D., F.A.C.P., Associate Professor of Medicine, Jefferson Medical College; Assistant Physician to the Jefferson Hospital, etc. Second revised edition, 1032 pages with 547 illustrations, some in colors. Cloth. F. A. Davis Company, Philadelphia, 1931.

PRACTICAL DIETETICS FOR ADULTS AND CHILDREN IN HEALTH AND DISEASE. By Sanford Blum, A.B., M.S., M.D., Head of the Department of Pediatrics, and Director of the Research Laboratories, San Francisco Polyclinic and Postgraduate School. Fourth revised and enlarged edition. 380 pages. Cloth. Price $4.00. F. A. Davis Company, Philadelphia, 1931.

THE DIAGNOSIS AND TREATMENT OF BRAIN TUMORS. By Ernest Sachs, A.B., M.D., Professor of Clinical Neurological Surgery, Washington University School of Medicine, Saint Louis. 396 pages with 224 illustrations, including 10 in colors. Cloth. Price $10.00. The C. V. Mosby Company, St. Louis, 1931.

CRIPPLED CHILDREN. Their Treatment and Orthopedic Nursing. By Earl D. McBride, B.S., M.D., F.A.C.S., Instructor in Orthopedic Surgery, University of Oklahoma School of Medicine, etc. 280 pages with 159 illustrations. The C. V. Mosby Company, St. Louis, 1931.

SURGERY. ITS PRINCIPLES AND PRACTICE FOR STUDENTS AND PRACTITIONERS. By Astley Paston Cooper Ashhurst, A.B., M.D., F.A.C.S., Professor of Surgery in the University of Pennsylvania; Surgeon to the Episcopal Hospital and to the Philadelphia Orthopedic Hospital, etc. Fourth edition, thoroughly revised. 1189 pages with 15 colored plates and 1063 illustrations in the text, mostly original. Lea & Febiger, Philadelphia, 1931.

THE CRIMINAL, THE JUDGE, AND THE PUBLIC. A Psychological Analysis. By Franz Alexander, M.D., Visiting Professor of Psychoanalysis at the University of Chicago; and Hugo Staub, Attorney-at-law, Berlin. Translated from the German by Gregory Zilboorg, M.D., Bloomingdale Hospital, White Plains, N. Y. 238 pages. Cloth. Price $2.50. The Macmillan Company, New York, 1931.

Book Reviews:

TEXTBOOK OF GYNECOLOGY. By Arthur H. Curtis, M.D., Professor and Head of the Department of Obstetrics and Gynecology, Northwestern University Medical School; 380 pages with 222 original illustrations. Cloth. Price $5.00. W. B. Saunders Company, Philadelphia and London, 1930.

This book is a monograph devoted exclusively to discussion of gynecological problems. It is characterized by an absence of extraneous discussion and consists largely of the author's own opinions. In view of the fact that it is almost exclusively a product of his own experiences, the book is of special interest. In the first place books are written that they may be read. Unless an author succeeds in expressing his personality in his writing, his book will fail in one of the most essential qualities of interest to the reader. Medical books are particularly deficient in this quality and for that reason often are uninteresting reading.

In reading this particular book one has a feeling that the author is making a serious attempt to convey to the reader a definite, practical, personal experience which he has found useful in the treatment of gynecological conditions. The book can be recommended unqualifiedly.

TEXT-BOOK OF MEDICINE. Edited by Russell L. Cecil, A.B., M.D., Sc.D., Assistant Professor of Clinical Medicine in Cornell University; Assistant Visiting Physician in Bellevue Hospital, New York City. And Associate Editor for Diseases of the Nervous System, Foster Kennedy, M.D., F.R.S.E., Professor of Neurology in Cornell University, etc. Second edition, revised and entirely reset. 1592 pages. Cloth. Price $9.00. W. B. Saunder Company, Philadelphia and London, 1930.

Perhaps it is true, as stated by some well-known clinicians and teachers, that few men as individuals will attempt to write and be responsible for a textbook on medicine. This opinion also may apply to other textbooks that cover an important field in medicine and surgery. At all events the author of this textbook on medicine has felt, and probably wisely, that he could give the medical profession a far more comprehensive and trustworthy textbook on medicine if he brought to his aid the services of collaborators selected with particular reference to the subjects upon which they are asked to write. Therefore, this book is the combined work of 125 contributors each one of whom was selected because of his fitness to discuss the subject assigned to him. The book represents the latest consensus of opinion on the subjects discussed. Indiana physicians will be interested in knowing that one of the most important chapters has been contributed by Dr. Charles P. Emerson, dean and professor of medicine in the Indiana University School of Medicine, who has furnished a chapter on atelectasis of the lungs, a subject upon which he is well qualified to speak authoritatively. The list of the contributors looks like a list of "Who's Who" among clinicians and teachers connected with all of our leading medical schools. Perhaps this is sufficient commendation of a work that should meet with the hearty approval and appreciation of the medical profession. The author concludes with the statement that this is an age of specialism and in the preparation of the book he has picked collaborators who are especially qualified to write authoritatively upon the subjects assigned.

PRACTICAL THERAPEUTICS. With special reference to the Application of Remedial Measures to Disease and Their Employment upon a Rational Basis. By Hobart Amory Hare, B.Sc., M.D., LL.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College of Philadelphia and Physician to the Jefferson Medical College Hospital. Twenty-first edition, enlarged, thoroughly revised and largely rewritten. 1104 pages with 145 engravings and 6 plates. Cloth. Price $7.50. Lea & Febiger, Philadelphia, 1930.

Twenty-one editions of any book would seem to establish a reputation not only for popularity but trustworthiness, and we are quite willing to endorse the present edition, as we have endorsed editions preceding it. The book always has been and is now a thoroughly up-to-date reference book for student and practitioner, and it fulfills the objects set down by the author when he says that "anyone who uses a book on therapeutics desires to have information as to the best drug or combination of drugs which he can use for the benefit of a given patient, or, to put it differently, he wants to know which one to use, when to use it, and equally important, when not to use it because the contraindications are greater than the indications." Therapeutics, like every other branch of medicine, is advancing constantly, and what seems good today may tomorrow be supplanted by something that is better. Hare's Therapeutics seems to recognize this fact to a greater extent than almost any other similar book with which we are acquainted, and, aside from a modification of some views expressed in an early edition, much new material has been added. These, enumerated by the author, include the present conception of the manner of action of calcium salts in various states, notably in dropsy and certain types of tetany; the use of ammonium chloride as a diuretic; the intravenous use of tartar emetic as a practical specific in the treatment of chancroids; the differential diagnosis of arsphenamine jaundice and so-called catarrhal jaundice; a discussion of the value of various preparations of bismuth in the treatment of syphilis; the use of carbon dioxide in connection with anesthesia and the fact that it is perhaps the most valuable remedy in the treatment of obstinate hiccough; the deleterious effect of prolonged dosage of cinchophen upon the liver; the discovery by Kamm and his coworkers that the active principle of the posterior lobe of the pituitary can be split into at least two active parts each of which are definitely therapeutic, in that pitressin represents the principle that raises blood pressure, and pitocin, which is a pure uterine stimulant; the necessity of clearly understanding that dextrose always should be used rather than ordinary glucose when given by the stomach or intravenously; newer views concerning the action of digitalis; information concerning such new remedies as viosterol in rickets and the efficient ventriculin in place of liver for relief in pernicious anemia; a further consideration of the intraspinal use of procaine; the value of salygen as a diuretic in cardiac dropsy and that of hexylresorcinol S. T. 37 as an antiseptic at once powerful and yet not toxic. These additions alone make the book valuable, but aside from that the entire text has been revised and re-edited. The therapeutic index has proved a useful means of quick reference in obtaining suggestive ideas as to treatment. All in all, the book is more useful than it ever has been before, and deserves the favor with which it has been received.

The College of Applied Gyropractic.

We have received what purports to be a catalog of the College of Applied Gyropractic. It is an interesting and amusing travesty or burlesque on some of the pseudo-medical cults of the manipulative variety. The so-called catalog gives the aims and purposes of gyropractic, entrance requirements, clothing required, members of faculty, rules for students, social welfare activities, and the address to the graduating class. Some of the interesting rules for students are as follows:

"Acute or chronic alcoholism in the classroom will be frowned upon. No part of the tuition fee will be refunded even though the student does not remain for the entire two weeks course.

"Extra diplomas for friends or relatives may be obtained from the proctor at a cost of ten cents each. Not over one dozen will be sold to any one student.

"After receiving his diploma no student will be allowed to remain or return to the college for any reason whatsoever.

"Any student on parole from a correctional institution must present a certificate from the warden thereof. Said certificate may be furnished by a friend or relative.

"We have discontinued the practice of using readers in the teaching of our healing art. It is indeed unfortunate that some of our graduates cannot read.

"Students habitually absent from classrooms are furnished with absent treatments at an additional cost of ten cents."

Among bits of advice from the proctor's address we note the following:

"Do not pay too much for testimonials. You will find that these can be purchased from various agencies at greatly reduced rates.

"When the time comes that you are forced to leave the community, do so quickly and you can re-establish your office under a different name in some far-away city.

"Learn a few long medical words.

"Try and keep your teeth brushed. See your dentist at least twice a year.

"Watch your finger-nails."

Copies of the catalog may be obtained for fifty cents each by addressing Sponsor, 21 East 37th Street, Indianapolis, Indiana.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

Pollen Extracts-Arlco.—The following pollen extracts-Arlco (New and Nonofficial Remedies, 1930, p. 29) have been accepted: Birch Mixture Pollen Extract-Arlco; Maple Mixture Pollen Extract-Arlco; Oak Mixture Pollen Extract-Arlco. Arlington Chemical Co., Yonkers, New York.—*(Jour. A. M. A.*, March 7, 1931, p. 773).

Iopax.—Sodium 2-oxo-5-iodopyridine-N-acetate. Iopax contains from 42 to 43.5 percent iodine. It is proposed for use intravenously in radiographic visualization of the urinary tract. It is also used for injection into the renal pelvis through the ureteral catheter for pyelography. The maximum intravenous dose is 30 Gm. of the powder dissolved in 100 cc. of redistilled water. Schering Corporation, New York.—*(Jour. A. M. A.*, March 14, 1931, p. 859).

Nupercaine-Ciba.—*a*-butyloxycinchoninic acid, 7-diethylethylenediamide hydrochloride. Nupercaine was first introduced as percaine. Nupercaine is a local anesthetic, acting like cocaine when applied to mucous surfaces and like procaine or cocaine when injected, the action being relatively prolonged. Nupercaine is about five times as toxic as cocaine when it is injected intravenously into animals, and its anesthetic activity is correspondingly greater than that of cocaine when it is applied to a mucous surface; it is many times more active than procaine hydrochloride when it is injected subcutaneously. It is reported to have caused necrosis of tissue in one case and a condition resembling gangrene with recovery in another. Death has been reported after the subcutaneous injection of 135 cc. of a solution of 1 in 1,000. The usual precautions should be observed when it is injected into the spinal canal or into the urethra. Nupercaine is supplied in the form of crystals; ampules buffered solution 2 cc., 1:200; ampules solution 5 cc., 1:1,000; solution 2 percent, and tablets, 0.05 Gm. Ciba Company, Inc., New York.—*(Jour. A. M. A.*, March 21, 1931, p. 946).

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry for inclusion in Accepted Foods:

H-O Oats (Quick) New Style (Hecker H-O Company, Inc., Buffalo, New York).—Oat flakes, lightly

toasted, cut small and rolled thin to permit quick cooking. The oat flakes contain practically all of the three portions of the groat—bran, germ and endosperm. The product contains: moisture, 8 percent; ash, 2 percent; fat, 7.3 percent; protein, 15.2 percent; crude fiber, 1.3 percent; carbohydrates, 66.2 percent.—*(Jour. A. M. A.,* March 7, 1931, p. 773).

LAND O'LAKES SWEET CREAM BUTTER (Land o'Lakes Creameries, Inc., Minneapolis).—A packaged, salted or unsalted butter graded by official federal-state butter graders as rating 93 score or higher. The cream used in the manufacture of this butter, the conditions, equipment and process of manufacture, and the final product must meet certain published standards and requirements adopted by the corporation. Before packaging, the butter is graded according to government standards by federal-state butter graders appointed by the U. S. Department of Agriculture in cooperation with the Minnesota State Department of Agriculture. The composition of the salt butter is: moisture, 15.8 percent; milk-fat, 80.7 percent; curd, 1 percent; salt, 2.5 percent. The composition of the unsalted butter is: moisture, 16 percent; milk-fat, 83 percent; curd, 1 percent.—*(Jour. A. M. A.,* March 14, 1931, p. 861).

KNOX PLAIN SPARKLING GELATINE (No. 1) (Charles B. Knox Gelatine Company, Inc., Johnstown, New York).—An unflavored, unsweetened granular gelatin. Knox gelatine is not chemically bleached nor does it contain preservatives. Strict sanitary control is exercised in the manufacture. The composition is: moisture, 13 to 14 percent; ash, 1 to 1.2 percent; protein, 85 to 86 percent; fat, 0.1 percent; arsenic as As_2O_3, 0.6 parts per million; copper as Cu, 2.5 parts per million. Knox gelatine contains no sugar or added flavor. It is one of the most readily digested proteins.

KNOX SPARKLING GELATINE (No. 3) (Charles P. Knox Gelatine Company, Inc., Johnstown, New York.—This product is essentially the same as Knox Plain Sparkling Gelatine No. 1. Each carton contains two envelopes of Knox Plain Gelatine and one envelope of fruit acid (citric acid). The citric acid is intended for admixture with the gelatin in various recipes.—*(Jour. A. M. A.,* March 14, 1931, p. 861).

VELVEETA (Kraft-Phenix Cheese Corporation, Chicago).—A delicious cheese food. Kraft Process American Cheese with added milk sugar, milk minerals and water. A cheddar cheese admixed with cream (or butter and skim milk powder), milk-whey powder and salt. The approximate composition is: moisture, 44 percent; ash, 6 percent; fat, 25.5 percent; protein, 18 percent; lactose, 6.3 percent; calcium, 0.53 percent; phosphorus, 0.71 percent; 75 mg. of Velveeta is equivalent to 10 mg. of butter in vitamin A potency. Velveeta is claimed by the manufacturer to be richer in milk minerals and lactose than the usual cheeses not containing the milk-whey.—*(Jour. A. M. A.,* March 21, 1931, p. 947).

PROPAGANDA FOR REFORM

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Sun Laxative Cold Breakers (The S. Pfeifer Manufacturing Company), tablets containing acetanilid, extracts of a laxative plant drug, traces of arsenic, and cinchona alkalois. B-L Cold and Grippe Tablets (The Blud-Life Company), containing 1 grain acetanilid together with a quinine compound, caffeine, camphor monobromate, aloin and a resin. Mathieu's Nervine Powders (Favreau and Collette), consisting essentially of acetanilid, sodium bicarbonate and caffeine. G. G. Germicide (Rose Rockwood), consisting essentially of formaldehyde, extracts of plant drugs including sassafras, alcohol and water. Success Cold Tablets (Walgreen Company), containing acetanilid, some laxative plant drug extractives, with wintergreen flavor. Muco-Solvent and Muco-Solvent Salve (Hessig-Ellis Drug Company and VanVleet-Ellis Corporation), the first consisting essentially of salicylic acid, extracts of plant drugs, glycerin, alcohol and water; the second consisting essentially of petrolatum and volatile oils, containing camphor, menthol, turpentine and spearmint. Nervac (Nervac Medicine Company) consisting of extracts of plant drugs including laxatives, salicylic acid, glycerin, and a small amount of alcohol, flavored with wintergreen. Da-Lee Mouth Wash (Da-Lee Chemical Company, Inc.), consisting essentially of sodium bicarbonate, small amounts of glycerin and volatile oils, with thirty-six percent of alcohol and water. Selso Headache Powders (The Standard Manufacturing Laboratories), containing acetylsalicylic acid, acetphenetidin and caffeine. Marvel Chemical Tablets (The Marvel Company), containing boric acid, compounds of aluminum, iron, zinc and calcium, sulphates, carbonates, tannic acid, menthol and thymol. Fritch's Vegetable Soap (J. A. Fritch), essentially a soap made from palm oil perfumed with oil of citronella.—*(Jour. A. M. A.,* March 7, 1931, p. 793).

ZINC CHLORIDE IN CANCER.—The use of zinc chloride and similar caustics in the treatment of cancer has been practically abandoned by all except the "cancer cure" quacks. Such caustics are difficult of control, so that there is destruction of healthy, as well as of malignant, tissue; their action is slow, thus unnecessarily prolonging the pain of removal. Much better results can be obtained by the judicious use of surgery when the growth is operable, or by the use of radium and roentgen rays when the disease has advanced beyond the chance of its complete removal. The use of such caustic has been abandoned also by the progressive dermatologists in the treatment of small epitheliomas of low malignancy; they use, instead, radium, roentgen rays, or coagulation with high frequency currents.—*(Jour. A. M. A.,* March 7, 1931, p. 797).

THYMOPHYSIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Thymophsin is stated to be a preparation of posterior pituitary and thymus, manufactured by Fritz-Pezoldt of Vienna and is marketed in this country by the American Bio-Chemical Laboratories, Inc. Because the claims for its action were inadequate, it was necessary to subject Thymophsin to examination by accurate pharmacologic methods to see whether the claims made for it are justified or whether it might not be merely a weak pituitary extract. This study was made by Prof. Erwin E. Nelson of the Department of Pharmacology at the University of Michigan. He studied the action of Thymophsin as compared with pituitary and again the action of thymus in connection with pituitary. Nelson concluded that there is no unequivocal evidence that either oxytoxic or pressor activities of pituitary are altered by the simultaneous administration of thymus; that experimentally no difference could be found in the oxytoxic or pressor activities of pituitary alone as compared with pituitary plus thymus; and that Thymophysin ampules contained only about thirty percent of the strength claimed. The Council declared Thymophysin unacceptable for inclusion in New and Non-official Remedies since it is an unscientific preparation marketed under false claims as to its essential action, as to its strength, and as to its safety for mother and child.—*(Jour. A. M. A.,* March 14, 1931, p. 860).

BOVININE AND NEOBOVININE NOT ACCEPTED FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Bovinine and Neobovinine are marketed by the Bovinine Company of New York and Chicago. In 1909 the Council reported that while Bovinine was advertised as a "condensed beef juice prepared by a cold process" it was not meat juice but a mixture of alcohol, glycerin, added sodium chloride, and apparently some form of defibrinated blood and that the product was marketed with unwarranted claims. In 1914 the Council

(Continued on Adv. Page xx)





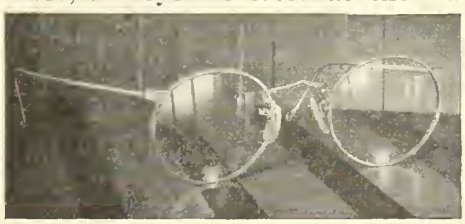
WHY *this new* **FUL-VUE** *for* **MEN?**

FUL-VUE *Senior* is the latest step toward overcoming the prejudice against glasses.

Ful-vue *Senior* is modern, a man's frame in every essential—none of the frills of women's glasses—none of the awkwardness or heaviness of old style glasses.

If any of your men patients are not satisfied with their appearanee in glasses, suggest that they try Ful-vue *Senior*.

The new, high temples, unobstructed vision at the sides, the eyes revealed at the sides, all these points and more make Ful-vue frames the most becoming yet designed. Incidentally, you'll like Ful-vue *Senior*, too. Why not try a pair?



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AMERICAN OPTICAL COMPANY

TRUTH ABOUT MEDICINES

(Continued from page 306)

reported that the unwarranted claims were for the greater part still made, and also that the conclusions of the first report were fully warranted by the experimental evidence. The Council has not given consideration to the product since the report in 1914 was issued. Attention having again been called to Bovinine through the advertising for a similar one, "Neobovinine," which is marketed with it, a referee of the Council reported that for Bovinine the situation remained about the same as when the product was last considered. Neobovinine 20 is stated to be "essentially BOVININE *(Plain)* in which is incorporated the active principle of fresh whole liver." Certainly the combination of Bovinine with a liver extract of undeclared character must be held an unscientific mixture. The case histories are entirely unsatisfactory and report conditions in which it is known that there could not possibly be the results reported. The cases of pernicious anemia are not reported with sufficient data on which to base an opinion. The Council reaffirmed the rejection of Bovonine and declared Neobovinine unacceptable because the information in regard to its composition is inadequate, because the therapeutic claims advanced for it are unwarranted, and because the combination of "Bovinine" with a liver extract of undeclared character is unscientific.—*(Jour. A. M. A.,* March 14, 1931, p. 860).

"SPIN-L-RON" NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that "Spin-L-Ron" is the nondescriptive name under which the Ford Chemical Company markets capsules, each stated to contain spinach dehydrated, 5 grains; liver extract powder, 2 grains; and iron and ammonium citrate, 3 grains. The Council declared "Spin-L-Ron" unacceptable for New and Nonofficial Remedies because it is a complex, unscientific mixture of indefinite composition, which is marketed under a nondescriptive name and with unwarranted therapeutic claims.—*(Jour. A. M. A.,* March 14, 1931, p. 860).

RESEARCH FOR A NON-HABIT-FORMING SUBSTITUTE FOR MORPHINE.—The Committee on Drug Addiction of the National Research Council announces a large collaborative research in alkaloidal chemistry by chemists and pharmacologists of this country. Apparently the present object of the committee is to prepare a non-habit-forming substitute for morphine that will yet possess the desirable action of morphine.—*(Jour. A. M. A.,* March 14, 1931, p. 863).

SCAR-POX, AN ALLEGED CURE FOR SMALLPOX AND SCARLET FEVER.—State and local health officials from Michigan to California have received a form-letter coming from the "White Laboratories" of Chicago, offering to send, on request, a free trial treatment of "Scar-Pox". Among the claims made for Scar-Pox were these: "Scar-Pox, the new and guaranteed remedy for scarlet fever or smallpox", "Scar-Pox is the tested remedy for the cure of either dread disease, scarlet fever or smallpox"; "It is a vegetable compound, absolutely pure"; "It is guaranteed by the makers to absolutely cure either scarlet fever or smallpox in three days when used as directed." Health officials who received a sample bottle of Scar-Pox were informed that a further supply could be obtained at $15 per bottle. The A. M. A. Chemical Laboratory analyzed "Scar-Pox" and concluded that it was essentially a solution of commercial cream of tartar (about 0.6 Gm. in 100 cc.). One of the most astounding features of modern civilization is the fact, verified daily, that any person, however ignorant of medicine or pharmacy, can put up the most fantastically worthless mixtures and sell them as "cures" for some of the most serious diseases known, and there is no legal machinery for stopping it—unless the exploiter is so crude as to violate either the national Food and Drugs Act or the postal laws against fraud.—*(Jour. A. M. A.,* March 21, 1931, p. 883).

DISINFECTANTS.—In combating contagion, modern sanitary practices have eliminated disinfectants for spraying walls, ceilings and floors of school rooms. The source of infection is the individual; so long as the infected individual is present in the room, any disinfectant that might be used on the walls or the floor would be of little if any value in preventing infection. Removal of the infected individual usually suffices to end the danger of spreading the infection. Soap and water is the best agent for cleaning floors, together with plenty of fresh air and sunshine. Terminal disinfection, such as fumigation with formaldehyde, has been generally discarded as valueless. In the case of lavatories, urinals and toilet bowls, so-called germicides in reality accomplish nothing except covering up the primary odor by the stronger odor of the chemical used. "Disinfection of hands" may be obtained by a thorough scrubbing with soap and water. In laboratories in which pathologic material is being handled, a solution of mercuric chloride or a solution containing "compound solution of cresol" may be employed.—*(Jour. A. M. A.,* March 28, 1931, p. 1098).

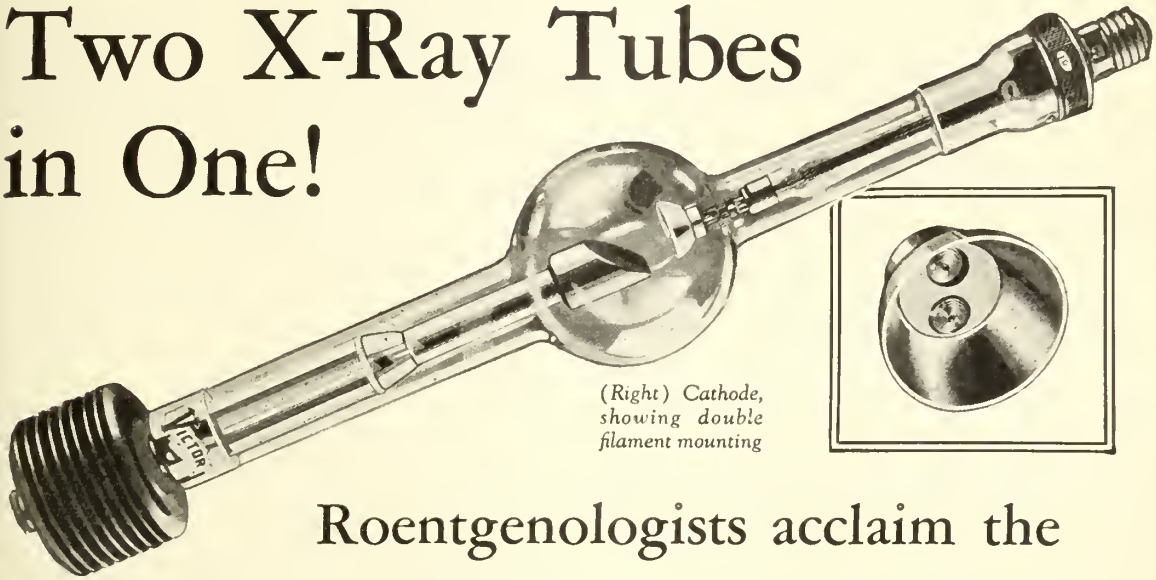
W. H. Y.—This product has been described by its exploiters, the Bartlett Nu Products Corporation, Azusa, California, as a "100 percent pure, concentrated food beverage." G. M. Bartlett, president, treasurer and general manager of the corporation, claims to be the "discoverer" of the formula for W. H. Y., the ingredients of which are said to be extracts of raisins, figs, walnuts, peanuts, barley, wheat and celery. In 1928 a Notice of Judgment was issued against W. H. Y. because of the false and fraudulent claims contained on the trade package. However, Mr. Bartlett has apparently continued to make equally false and fraudulent claims in such advertising as does not go with the trade package. As W.H.Y. was sold through the United States mails, this brought Mr. Bartlett in conflict with the postal authorities, who have declared the exploitation of W. H. Y. fraudulent and debarred it from the mails.—*(Jour. A. M. A.,* March 21, 1931, p. 967.)

THE CONTROL OF NARCOTIC ADDICTION.—Narcotic addiction is again the focus of an extraordinary amount of attention. The results of investigations concerning the subject are being made public. The taking of narcotics is usually an attempt on the part of someone with little will power to achieve a state of euphoria or artificial happiness. The addict finds withdrawal accompanied by exceedingly unpleasant symptoms and tends to succumb again. Apparently it is possible for an experienced physician to carry an addict through the withdrawal period with relatively little distress. The importance of narcotic preparations should not be underestimated. Nevertheless there exist in medicine innumerable occasions when one or more of the relatively non-habit-forming sedatives, narcotics, hypnotics and analgesics may be employed to substitute for an opium derivative. A series of articles is to be published in an effort to indicate the relatively few instances demanding the administration of opium or cocaine derivatives and the many available substitutes. It is estimated that under twenty-five percent of narcotic addiction results from prescriptions by physicians in cases in which such prescribing may not have been absolutely necessary. The physician must try to limit his prescribing of narcotics absolutely to those situations where they are indispensable. The medical use of narcotics in the United States appears to surpass that of any other nation. Efforts are being made to limit the prescribing of narcotics to those instances where their use is indispensable.—*(Jour. A. M. A.,* March 14, 1931, p. 862).

WHAT ONE NEWSPAPER DID TO PROTECT THE PUBLIC AGAINST CHARLATANS.—Last July the Philadelphia *Record* started to look into the problem of medical quackery and published a most interesting and enlightening series under the general title, "Bootlegging the Healing Arts." The *Record* called for no help from the medical profession, either locally or nationally. The *Record* reports that thirty-seven cases were brought up with thirty-five convictions.—*(Jour. A. M. A.,* March 14, 1931, p. 883).

(Continued on adv page xxii)

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(Right) Cathode, showing double filament mounting

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TRUTH ABOUT MEDICINES

(Continued from adv page xx)

DI-CITURIN NOT ACCEPTABLE FOR N. N. R.—Di-Citurin is stated by the Chemico-Biologic Laboratories to be "Potassium Acetyl Citrate" and in the advertising it is asserted that the product is "a basic compound, not a mixture." In the information submitted to the Council on Pharmacy and Chemistry, however, the firm states that "the substance is acetylated citrate of potassium with magnesium salicylate present as a by-product." Furthermore, the A. M. A. Chemical Laboratory reported that a microscopic examination of a specimen of the product revealed two distinct and separate sets of crystals, one resembling potassium acetate closely, the other resembling potassium citrate. The Council found Di-Citurin unacceptable for New and Nonofficial Remedies because its composition is not correctly declared; because the therapeutic claims advanced are exaggerated and unwarranted; because its therapeutically suggestive name will lead to uncritical use, and because no evidence is offered that the product possesses any advantages over a mixture of its components, over a simple mixture of alkali acetate and citrate, or over alkali acetate or alkali citrate alone. —(*Jour. A. M. A.*, March 21, 1931, p. 947).

ABSTRACTS

INSULIN IN MALNUTRITION

In the treatment of malnutrition, Roy D. Metz, Taylors, South Carolina (*Journal A. M. A.*, May 2, 1931), orders the usual general diet and injects insulin thirty minutes before each meal. On the first day, three doses of 10 units are given. This is increased 5 units each day up to 20 or 30 units three times daily. He has found 20 units three times daily most satisfactory. He has had no experience with its ambulatory usage. The insulin reaction, naturally guarded against by the tissue sugar, is an important consideration. It is to be explained minutely and emphatically to all patients who receive insulin. This should be done at the beginning of the treatment. It is really preferable to cause a hypoglycemia and explain fully the symptoms as they arise. The pulse first becomes rapid and the vision blurred with mydriasis. Then follows the nervousness best illustrated by the increasing tremor of the extended fingers. Then ensues hunger, which becomes more and more intense. Then appears perspiration with its subsequent thirst and weakness. These symptoms are important to the patient in inverse proportion to the stability of the nervous system. Patients should not be allowed to show greater evidence of hypoglycemia than is indicated by these symptoms. The rapidity with which the hypoglycemic symptoms disappear, following the ingestion of sugar, is almost miraculous. After one experience with a hypoglycemic state, the patient takes a recurrence as a matter of course, calmly and without excitement. To give the patient a more profound sense of security, sucrose is kept on the bedside table so that it is easily accessible at all times. As an additional precaution, orange juice and commercial grape juice are readily available. As a supplement to these, a tray is in readiness on which are placed all necessary apparatus and materials for intravenous injection of 20 and 50 percent dextrose in varying quantities. These precautions practically obviate any serious calamity that might be inaugurated. When the weight has reached a definite maximum, insulin loses its influence. This maximum is closely governed by the particular individual's normal weight. Among the beneficial effects of this treatment, the gain in weight is of primary importance, although the general improvement frequently surpasses it. This seems to be the result of a readjusted metabolism. Whether this is brought about in the constitutionally asthenic person purely through an endocrine readjustment is, as yet, speculative. Nevertheless, its general effects are quite obvious. Five unselected cases are reported to illustrate the possibilities of the treatment of malnutrition with insulin.

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ORIGINAL ARTICLES

UNUSUAL MANIFESTATIONS AND COMPLICATIONS OF EXOPHTHALMIC GOITER AND OF ADENOMATOUS GOITER WITH HYPERTHYROIDISM*

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In considering the diagnosis of diseases of the thyroid gland it is essential that an attempt be made to differentiate exophthalmic goiter and adenomatous goiter with hyperthyroidism. Occasionally either type of goiter manifests unusual symptoms or is associated with some other disease which masks the clinical picture of disease of the thyroid gland; in these circumstances, recognition of the hyperthyroidism is more difficult. I shall comment chiefly on the unusual and masked signs of hyperthyroidism. It is important that the classification, pathology, pathologic physiology and usual symptoms of goiter are understood before the atypical manifestations of exophthalmic goiter and of adenomatous goiter with hyperthyroidism are discussed.

Classification. H. S. Plummer's nomenclature of diseases of the thyroid gland includes the following classification of goiter: (1) diffuse colloid goiter; (2) adenomatous goiter without hyperthyroidism; (3) adenomatous goiter with hyperthyroidism, and (4) exophthalmic goiter.

Pathology and Pathologic Physiology of Adenomatous Goiter with Hyperthyroidism and of Exophthalmic Goiter. Adenomatous goiter with hyperthyroidism is a constitutional disease in which the adenomatous tissue present in the thyroid gland maintains thyroxin in the tissues of the body in amounts excessive of the normal requirements. Thereby the basal metabolic rate is elevated and clinical manifestations secondary to the increased metabolism are produced. Similar symptoms and signs can be produced in the normal person by the administration of sufficient thyroxin or thyroid extract to elevate the basal metabolic rate to the same level as that of a patient who has adenomatous goiter with hyperthyroidism. To produce this effect, administration of the preparation used must be continued for a period of time comparable to that over which abnormality exists in a patient. It is assumed that in patients the disease is due to pure hyperthyroidism; that is, a condition due to excessive secretion of the normal product of the thyroid gland.

Exophthalmic goiter is a constitutional disease in which the thyroid gland undergoes diffuse parenchymatous hypertrophy, and in which are manifest all of the clinical features of adenomatous goiter with hyperthyroidism together with an additional syndrome characteristic of exophthalmic goiter. This syndrome comprises the tendency to development of exophthalmos, certain peculiar nervous manifestations, and gastro-intestinal crises. Postoperative toxic reactions may occur, and occasionally they terminate fatally within twenty-four to forty-eight hours in cases in which, previous to operation, the risk had appeared to be excellent. H. S. Plummer has shown that, following judicious administration of iodine, most of the outstanding and characteristic features of exophthalmic goiter tend to disappear, and that postoperative reactions are practically abolished. In explanation of such clinical differences between exophthalmic goiter and adenomatous goiter with hyperthyroidism Plummer has advanced the theory that there are two products responsible for the symptoms and clinical picture of exophthalmic goiter; namely, that the thyroid gland secretes an excessive amount of normal product and probably in addition a product abnormal in quality which later is responsible for the features characteristic of exophthalmic goiter.

Symptoms and Signs Common to Both Exophthalmic Goiter and Adenomatous Goiter with Hyperthyroidism. Both exophthalmic goiter and adenomatous goiter with hyperthyroidism are associated with a state of hyperthyroidism and elevation of the basal metabolic rate, and it is therefore according to expectation that many of the symptoms and clinical signs are common to both types of goiter. Thus there is, usually, tachycardia and increased pulse pressure. A certain degree of nervous irritability usually is associated with both diseases. The patient who is suffering

*Read before the Madison County Medical Society, Anderson, Indiana, April 15, 1930.

from adenomatous goiter with hyperthyroidism, however, does not display the marked nervous stimulation so characteristically seen in cases of exophthalmic goiter. A fine, rhythmic tremor is present in both types of goiter, but this is usually more intense in cases of exophthalmic goiter. There is frequently loss of strength as a result of actual muscular weakness. In attempting to step up on an ordinary chair the patient suffering from hyperthyroidism demonstrates this muscular weakness in the loss of power in the quadriceps muscles. Increased appetite characteristically develops and frequently a corresponding increase in intake of food results. In cases of exophthalmic goiter the patient's appetite sometimes becomes voracious, and the daily requirement is from 3,000 to 5,000 calories. Rapid and marked loss of weight frequently occurs, particularly in cases of exophthalmic goiter. Gain or loss of weight depends on the caloric intake, as well as on the severity of the hyperthyroidism. Rapid loss of weight in the presence of normal or increased caloric intake should be regarded as a possible indication of hyperthyroidism.

The increased metabolic processes result in increased production of heat in the body, dilatation of the peripheral blood vessels and increased activity in the sebaceous and sweat glands. The patient therefore presents a greasy, sweaty appearance and has an increased tolerance to cold, shown by preference for lowered room temperature and for sleeping under less bed covering than he previously did.

Trophic changes in the nails frequently occur and are seen particularly in severe, protracted cases of exophthalmic goiter. The characteristic changes in the nails are longitudinal striation, turning up of the distal portion of the nail, and separation of the nail from its bed with an irregular line of cleavage.

Features Characteristic of Exophthalmic Goiter. Exophthalmic goiter occurs on an average in younger persons than does hyperthyroidism associated with adenomatous goiter. In The Mayo Clinic sixty percent of the cases of exophthalmic goiter occur in patients who are less than forty years of age. The onset of symptoms may be sudden or insidious. There is greater variability in the course of the disease than in that of adenomatous goiter with hyperthyroidism, and a distinct tendency to exacerbation and remission of symptoms is manifest. The patient has a fairly characteristic appearance of so-called stimulation, in the usual case of exophthalmic goiter. There are many useless and semipurposeful movements, particularly if the patient is agitated. Speech is incisive and the patient presents a tense appearance. In certain phases of the disease these symptoms may be in abeyance, and this is especially true if iodine has been administered recently. In about fifty percent of the cases seen at The Mayo Clinic, exophthalmos is present. Other ocular signs, which are rather characteristic of exophthalmic goiter, may be present even in the absence of exophthalmos. These are stare, rapidly shifting gaze, irregular blinking of the eyelids, and edema of the eyelids. Diffuse pigmentation of the skin is also seen frequently, particularly in persons of dark complexion. Marked pruritis also may be present.

The thyroid gland may or may not be appreciably enlarged. Usually, in exophthalmic goiter, palpation of the thyroid gland reveals a firm, symmetric enlargement of granular character. Localized thrill and bruit over the poles are of great significance, and probably are exceeded in diagnostic value only by exophthalmos. A prolonged, harsh, systolic bruit heard directly over the poles, particularly the superior pole, and diminishing in intensity as the stethoscope is moved away from the pole is almost conclusive evidence of exophthalmic goiter. Localized thrills are of similar significance. These bruits and thrills occur occasionally in cases of large, colloid goiter, but without associated clinical evidence of hyperthyroidism and in the presence of normal or subnormal basal metabolic rates. The bruits described in the foregoing must not be confused with carotid bruits or venous hums. A carotid bruit is short and high pitched, and is best heard over the carotid artery, increasing in intensity as the stethoscope is moved down the course of the artery. Its significance is unknown. The absence of bruits and thrills does not exclude the diagnosis of exophthalmic goiter, since in twenty percent of untreated cases of exophthalmic goiter, neither bruits nor thrills are heard, and since they tend to disappear rapidly following administration of iodine.

One of the most striking features of exophthalmic goiter is the tendency to development of gastro-intestinal crises and toxic postoperative reactions. In crisis the patient usually is very much stimulated, thrashes about in bed, occasionally complains of abdominal soreness, usually is nauseated and vomits, and frequently has severe diarrhea. If crisis is prolonged, extreme emaciation and dehydration result. In the crises of exophthalmic goiter, the patient's response to iodine often is miraculous. Within a period of only a few hours, or at most a few days after initiation of treatment with iodine, the patient who has been critically ill may be well on the way to recovery, and within a period of two or three weeks he may constitute a good surgical risk. Likewise, judicious preoperative administration of iodine to the patient with exophthalmic goiter practically always will prevent development of postoperative toxic reactions.

Features Characteristic of Adenomatous Goiter with Hyperthyroidism. On an average, the onset of hyperthyroidism associated with adenomatous goiter occurs later in life than that of exophthalmic goiter. In seventy-eight percent of the cases of adenomatous goiter with hyperthyroidism in The Mayo Clinic, the patient was more than forty years of age. Although hyperthyroidism may develop at any time after adolescence, it is seldom seen in

patients who are less than thirty years of age. The presence of goiter had been noted on an average of sixteen years preceding the development of symptoms of hyperthyroidism in the cases seen at The Mayo Clinic. The onset of symptoms of the disease usually is insidious and before the patient is aware of its presence the hyperthyroidism, as in the series just cited, may have been present for a long period. There is no change in the size, shape or consistence of the goiter, to indicate the onset of hyperthyroidism; in fact, the goiter frequently becomes smaller, probably as a result of loss of colloid. The patient's complaints are usually failing health and loss of weight. Occasionally the adenoma or adenomas are substernal or retrotracheal, in which instance enlargement of the thyroid gland will not be in evidence on inspection or palpation. Frequently the adenoma may be brought into view and grasped, however, by having the patient cough or swallow. In these cases the diagnosis is likely to be missed, and the patient may be suspected of having a hidden malignant growth elsewhere in the body, or a degenerative cardiac lesion. Bruits and thrills seldom are present in cases of adenomatous goiter with hyperthyroidism, and, if so, they are not of diagnostic significance. Likewise, there are no notable ocular signs.

Diagnosis of Exophthalmic Goiter and of Adenomatous Goiter with Hyperthyroidism and Comment on Atypical Manifestations. Evaluation of various factors in diagnosis will involve mentioning a second time a few of the symptoms and signs to which attention already has been called.

Early in the course of exophthalmic goiter and of adenomatous goiter with hyperthyroidism the symptoms may be so indefinite and atypical that differentiation from other diseases may be difficult. The normal person, during a period of emotional or physical stress, presents many manifestations which are also produced by hyperthyroidism: tachycardia, elevated blood pressure, nervousness, weakness, and tremor. Such findings are subject to less transient variation, however, in the person who is suffering from hyperthyroidism. Early in the course of either exophthalmic goiter or adenomatous goiter with hyperthyroidism the patient may experience an unusual sense of well-being as a result of slight elevation of metabolism; this is evidenced by a sense of warmth, increased appetite, and a greater amount of nervous energy. In these circumstances, early diagnosis is made possible only through the apprehension of friends or relatives of the patient who urge him to seek the advice of a physician on account of nervous irritability or some other symptoms which the patient has not recognized.

A very difficult problem in differential diagnosis often is presented by the patient who has a small, symmetric, or nodular enlargement of the thyroid gland, and who complains of nervous manifestations. This is well illustrated by the difficulty encountered in excluding exophthalmic goiter in the case in which the patient presents an effort syndrome in the presence of a colloid goiter. Likewise, the patient with a symmetrically enlarged thyroid gland and emotional instability presents a problem in diagnosis, for in cases of exophthalmic goiter there are occasionally severe emotional upsets evidenced by episodes of crying, periods of depression, and so forth. Other clinical features, such as tachycardia, increased pulse pressure, and elevated basal metabolic rates, however, are more constant in patients who are suffering from hyperthyroidism than in those who are neurotic. Moreover, the patient who is suffering from hyperthyroidism has a sense of warmth, and demonstrates self-confidence and optimism that are entirely lacking in the neurotic person. The patient with hyperthyroidism prefers a cool room, sleeps with less bed covering, and has a warm, moist, flushed skin, whereas the neurotic person is intolerant to cold and oftentimes has a cool, clammy skin. The neurotic patient suffers from a subjective sensation of weakness, rather than actual loss of muscular power; he will step up on a chair in a slow, hesitant manner. To do this is utterly impossible for the patient suffering from hyperthyroidism, in which there is actual loss of strength in the quadriceps muscles. In doubtful cases basal rates are more likely to be secured in a neurotic patient if a sedative is administered for several days before metabolic studies are undertaken. Furthermore, in cases of neurosis, there is not the symptomatic improvement nor drop in the basal metabolic rate following administration of iodine, which occurs so characteristically in most cases of exophthalmic goiter.

In the occasional case of adenomatous goiter with hyperthyroidism or of exophthalmic goiter, especially in the latter, little of the usual syndrome may be evident, but one of the usual symptoms or signs of the disease may be present in an exaggerated degree, or some unusual symptoms may be present.

A severe degree of anemia sometimes occurs in cases of hyperthyroidism of long standing. Anacidity and splenomegaly frequently are associated with uncomplicated cases of exophthalmic goiter, and in such instances there is danger of assuming that the anemia is on the basis of a blood dyscrasia.

In some cases of exophthalmic goiter protracted diarrhea is the only complaint of the patient. Except for the fact that the diarrhea occurs without tenesmus or colic, there is nothing characteristic about it in these cases. When anacidity is present it is likely to be considered the causative factor in the diarrhea; this assumption forestalls recognition of the exophthalmic goiter.

Amenorrhea is frequent in the course of exophthalmic goiter. However, it may be incorrectly diagnosed as being due to early pregnancy, particularly if there is an associated vomiting crisis.

Pruritis and urticaria are at times annoying symptoms in the course of exophthalmic goiter.

and occasionally they are the chief complaint of the patient. Angioneurotic edema occasionally is noted as a sequela in the course of exophthalmic goiter. We have observed four patients suffering from exophthalmic goiter who displayed the same symptom complex seen in cases of periodic familial paralysis, in which the paralysis appeared to be dependent on the existence of hyperthyroidism.

Ocular palsy, with or without associated exophthalmos, is occasionally the predominant manifestation in the course of exophthalmic goiter. At times unilateral or bilateral exophthalmos is the patient's presenting complaint. Occasionally in these cases the thyroid gland is not palpable, or only barely so, and the patient's basal metabolic rate is normal or only slightly elevated. If the diagnosis of orbital tumor and arteriovenous aneurysm involving the internal carotid artery and cavernous sinus can be excluded in the presence of unilateral or bilateral exophthalmos, it is fairly safe to assume that the exophthalmos is secondary to exophthalmic goiter.

Normal basal metabolic rates are occasionally obtained in cases in which the clinical picture is that of hyperthyroidism. There are several theoretical explanations for this, but the limits of this paper make discussion of the theories inappropriate.

Prostration and loss of weight occasionally are the predominant or the only complaints of the elderly patient suffering from either exophthalmic goiter or adenomatous goiter with hyperthyroidism. The stimulation associated with exophthalmic goiter, so characteristic in younger persons, often is absent in elderly patients. The pulse and pulse pressure may be normal. The thyroid gland may be normal in size in cases of exophthalmic goiter, and in cases of adenomatous goiter with hyperthyroidism the adenoma may be substernal or retrotracheal. Occasionally the elderly patient is referred to the clinic because of the suspicion that an obscure, malignant lesion is responsible for the patient's failing health. The diagnosis is extremely difficult in these cases. However, clinical or roentgenologic evidence of a malignant lesion is absent, and clinical signs suggestive of hyperthyroidism are present. Thus, the actual condition, hyperthyroidism, is disclosed.

In obscure and unusual cases, a painstaking history relative to the possibility of increased caloric intake and to changes in tolerance to the environmental temperature may furnish a clue to the diagnosis. Careful scrutiny of the patient likewise may reveal such signs as pigmentary changes in the skin, increased perspiration, flushing of the skin, edema of the eyelids, trophic changes of the nails, the presence of stare, irregular blinking of the eyelids, and rapidly shifting gaze, any of which should arouse suspicion of the presence of a state of hyperthyroidism. Sustained elevation of the basal metabolic rate, in the absence of fever or of some other morbid process which results in increased metabolism, is of confirmatory value in association with the aforementioned signs. Symptomatic and clinical improvement, and a lowered basal metabolic rate after trial use of compound solution of iodine (Lugol's solution) for a period of from seven to ten days is further corroborating evidence of exophthalmic goiter.

Exophthalmic Goiter and Adenomatous Goiter with Hyperthyroidism Associated with Other Diseases. Coincidentally with either exophthalmic goiter or adenomatous goiter with hyperthyroidism, other diseases may occur and the symptoms of the latter may be aggravated by the hyperthyroidism or may mask the hyperthyroid state.

Not only the symptoms of associated diseases, but evidences of coexisting pregnancy may render the diagnosis of hyperthyroidism difficult. Mussey, Plummer and Boothby reported coexisting pregnancy and hyperthyroidism in forty-two of 7,228 women suffering from exophthalmic goiter or from adenomatous goiter with hyperthyroidism, an incidence of 0.6 percent. During the latter months of pregnancy there is a normal tendency to enlargement of the thyroid gland and elevation of the basal metabolic rate. Sandiford and Wheeler have shown that the metabolism is increased as much as twenty to twenty-five percent above the Dubois standard of normal. The vomiting associated with the crisis of exophthalmic goiter in a patient who is pregnant occasionally is mistaken for the vomiting associated with the toxemia of pregnancy.

The symptoms of the parkinsonian syndrome that may follow encephalitis may be mistaken for those of a state of hyperthyroidism. The basal metabolic rate in such cases may be elevated as a result of the increased muscular activity resulting from tremor. The two conditions may be associated, in which instance the postencephalitic syndrome may be greatly exaggerated by the hyperthyroidism. In cases in which the conditions coexist, the patient's general health may be improved, and he may be able to resume his usual activities following thyroidectomy, if he is not incapacitated by the residual encephalitis.

There has been a good deal of controversy as to the causal relationship of hyperthyroidism in the occurrence of psychotic manifestations, which in the occasional case, occur during the course of either exophthalmic goiter or adenomatous goiter with hyperthyroidism. Other than the temporary delirium or toxic psychosis occasionally seen in the course of a crisis of exophthalmic goiter, or during a postoperative toxic reaction, however, it is doubtful that hyperthyroidism ever causes true psychosis. Exophthalmic goiter or adenomatous goiter with hyperthyroidism may develop in a psychotic person, and in such a case operation on the thyroid gland may improve the general condition of the patient and thus favorably influence the psychosis.

Diabetes mellitus and hyperthyroidism simulate each other in that, in both conditions, there is frequently rather marked loss of weight and

strength in spite of normal or increased intake of food. Furthermore, the incidence of transient glycosuria is somewhat high in cases of hyperthyroidism. In these cases a normal or only slightly elevated concentration of fasting blood sugar and return to normal of the curve of sugar tolerance within a period of two hours is to be anticipated. Wilder reported coexisting diabetes mellitus in 0.6 percent of the cases of exophthalmic goiter and in two percent of the cases of adenomatous goiter with hyperthyroidism in a series of cases studied in The Mayo Clinic. He stated that mild and possibly inconspicuous diabetes mellitus may be fanned into flame by hyperthyroidism, and that severe exophthalmic goiter with crisis readily will provoke coma in a diabetic patient. In the presence of obvious diabetes mellitus, coexisting exophthalmic goiter or adenomatous goiter with hyperthyroidism is likely to be overlooked; this is especially true if the case is one of exophthalmic goiter in which the thyroid gland is normal in size and the ocular signs absent, or if the patient is seen in a state of coma. Wilder expressed the belief that the possibility of coexisting hyperthyroidism should always be borne in mind in those cases of diabetes mellitus in which the patient is in coma. He also stated that in cases of hyperthyroidism coexisting with diabetes mellitus the insulin requirement is increased. He found that the administration of compound solution of iodine in cases in which exophthalmic goiter coexisted with diabetes mellitus lessened the intensity of the diabetes and effected improvement parallel to the reduction of the basal metabolic rate. Wilder stated that iodine had little or no effect on the course of diabetes mellitus when it was associated with adenomatous goiter with hyperthyroidism or on the course of cases of uncomplicated diabetes mellitus. There is practically always a lessening of the severity of the diabetes mellitus following subtotal thyroidectomy in cases of coexisting diabetes mellitus and a state of hyperthyroidism; this is demonstrated by the decreased insulin requirement and the increased tolerance to carbohydrates.

The study of the relationship of hyperthyroidism to changes in the circulatory system is of great interest to clinicians who deal with goiter. As I have previously stated, accelerated pulse rate, increased pulse pressure, moderate elevation of the blood pressure, and peripheral vascular dilatation are to be anticipated in the presence of the disease. There is an increased cardiac output per beat as well as an increased minute volume output of the heart. There may be physiologic dilatation of the heart. Cardiac compensation is maintained so long as the force of cardiac contraction increases proportionately to the increased diastolic filling. Cardiac failure begins when ventricular output fails to keep pace with the increased diastolic filling. There is considerable doubt that a normal heart ever fails as a result of hyperthyroidism. In certain cases of cardiac hypertrophy and failure observed in the presence of either exophthalmic goiter or adenomatous goiter with hyperthyroidism, however, additional organic basis cannot be established at necropsy.

Cardiovascular manifestations frequently are prominent in cases of hyperthyroidism, and at times they are the only obvious features. Systolic murmurs heard best over the pulmonic and mitral areas are the rule, although they are not of diagnostic significance. Auricular fibrillation, auricular flutter and congestive heart failure are relatively frequent in the course of exophthalmic goiter and adenomatous goiter with hyperthyroidism. Often these findings cause the patient to be treated on the basis of arteriosclerotic or hypertensive cardiac disease, and the underlying hyperthyroidism goes unrecognized. Normal rhythm frequently is restored and evidence of failure disappears, however, following thyroidectomy. Even in the face of a coexistent organic cardiac lesion, removal of the extra work imposed by the hyperthyroidism often produces great improvement in the cardiac mechanism and restores to an active life a patient who otherwise would be an invalid. Early diagnosis is essential, however, to forestall irreparable cardiac injury. Coronary sclerosis with angina pectoris often is accentuated or brought to light by coexisting hyperthyroidism. Haines and Kepler, on the basis of a group of cases seen in The Mayo Clinic, recently came to the conclusion that there is practically universal aggravation of the anginal symptoms by the hyperthyroidism, and noticeable improvement or cessation of symptoms following thyroidectomy.

The recognition of underlying exophthalmic goiter or of adenomatous goiter with hyperthyroidism in cases in which there is obvious injury to the heart usually is difficult, but it is particularly so in the absence of exophthalmos and of appreciable enlargement of the thyroid gland. Many of the patients in this group are elderly and fail to show the nervous irritability which occurs so characteristically in younger persons who are suffering from hyperthyroidism. Hyperthyroidism should always be suspected as the causative factor of auricular flutter, auricular fibrillation, and congestive cardiac failure, especially in the absence of any obvious etiologic factor and in cases in which there has been no response to the usual measures employed in treatment of these conditions of the heart. A careful search for the characteristic features of hyperthyroidism, as heretofore enumerated, should be made in these cases. The clue to the diagnosis of hyperthyroidism oftentimes is furnished by close search for pigmentary changes in the skin or trophic changes in the nails. Other valuable leads to establishing the diagnosis include increased tolerance to cold, stare, localized thrills and bruits, and objective loss of power of the quadriceps muscles. The patient with heart disease may complain of weakness, but it is more subjective than objective weakness. The basal metabolic rate, in the face of

failure of cardiac compensation, is of little diagnostic value.

The differential diagnosis of essential or malignant hypertension in the presence of simple colloid or adenomatous goiter, and of essential or malignant hypertension with coexistent exophthalmic goiter or adenomatous goiter with hyperthyroidism is one of the most difficult problems encountered in a study of thyroid disease. Many of the features which are characteristic of hyperthyroidism may also be associated with hypertension; namely, tachycardia, palpitation, dyspnea, subjective weakness, nervousness, tremor, increased tolerance to cold, insomnia, increased pulse pressure, and a tendency to cardiac failure. Frequently, the patient who has hypertension has lost weight as a result of restricted diet. The basal metabolic rate may be elevated. Boothby and Sandiford in the study of 170 cases of essential hypertension found the basal metabolic rates to be as follows: Within the normal limits of plus 15 to minus 15 percent in 89.4 percent of the cases reviewed; from plus 16 to plus 20 percent in 7.2 percent of the cases, and more than plus 20 percent in 3.4 percent of the cases. Mannaberg, reporting on twenty cases of essential hypertension in which basal metabolic studies were done, found in every case an elevated basal metabolic rate ranging from 13.3 to 54.9 percent. Keith, Wagener and Kernohan, in a study of the syndrome of malignant hypertension, reported basal metabolic studies in thirty-nine cases. In fourteen cases in which the metabolism was normal the thyroid gland likewise was normal on palpation. Among seventeen cases in which the metabolic rate ranged from plus 10 to plus 20 percent there were three instances of adenoma of the thyroid gland, but in no instance was there clinical evidence of hyperthyroidism. In eight cases in which the basal metabolic rate ranged from plus 20 to plus 40 percent, palpable adenoma of the thyroid gland was reported, in two cases without clinical evidence of hyperthyroidism. It was concluded that the elevated basal metabolic rate was caused by some factor other than disease of the thyroid gland.

Summary. I have attempted to emphasize the fact that recognition of exophthalmic goiter or of adenomatous goiter with hyperthyroidism is at times difficult, especially in those cases in which the hyperthyroidism is manifested by bizarre symptoms or in which the usual clinical picture is masked by some associated disease. The symptoms of the associated disease frequently may be so exaggerated by the hyperthyroidism that the former appears to play a dominant role as a causative factor in the patient's illness. Frequently, however, alleviation of the hyperthyroidism by subtotal thyroidectomy will so ameliorate the severity of the coexistent disease as to restore to an active state of life a patient who otherwise would be an invalid.

I have attempted also to emphasize the fact that certain symptoms, such as increased caloric intake, increased tolerance to cold, and certain clinical signs such as pigmentary changes, trophic changes of the nails, various ocular manifestations, and so forth, at times may furnish a clue leading to the establishment of a diagnosis of exophthalmic goiter or of adenomatous goiter with hyperthyroidism in otherwise obscure maladies. A therapeutic test with compound solution of iodine, with resultant clinical improvement and fall in basal metabolic rate, may at times be the deciding factor in establishing the diagnosis in obscure cases in which exophthalmic goiter is suspected.

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UPPER RESPIRATORY INFECTION AS A FACTOR IN ASTHMA*

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The old adage, "Make the diagnosis and the treatment will suggest itself," may be true in certain phases of medical practice, but make a diagnosis of "asthma" and try and find the cause and treatment that will cure the unfortunate person. I do not know of an illness more mysterious and elusive. The literature on this subject is voluminous, and the diversified opinions numerous. I regret that I cannot come to you and say I have found the cure for this malady. All I can do is to review some of the more recent literature, and tell what I know from my own experience, obtained by careful study of the upper respiratory tract. No formulation of the treatment of a case is possible without the sifting of all causes predisposing and exciting.

Walker[1] states that, "An attack of typical or true bronchial asthma consists of a cycle of events." There has been produced either centrally or peripherally an irritation of the nerves that innervate the smooth muscular tissue lining the bronchi, causing a spasm or constricture of the bronchial

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musculature. The muscles of inspiration are equal to the task of drawing air through the constricted bronchi into the air-cells of the lung, but the elasticity of the lungs, together with the muscles of expiration are not sufficient to expel the inspired air in the normal time, so that expiration becomes prolonged and is finally interrupted by an inspiration before the normal amount of air has left the lungs.

As a result of this the lungs become overdistended with residual air, and sooner or later this overfilling of the lungs causes labored inspiration, although expiration remains more labored and prolonged than inspiration. The attack is now at its maximum. It may continue for only a few minutes, or may extend over a period of hours. I have seen a few cases where it has extended for months, and relief could only be obtained by an agent which would relieve the congestion or diminish the irritability of the pneumogastric nerve. Here I wish to quote Chevalier Jackson:[2] "All is not asthma that wheezes." Wheezing in some cases coming on suddenly at night and in most cases more or less paroxysmal has been bronchoscopically discovered to occur in endobronchial stenoses of the following kinds: edematous, aneurysmal, goitrous, paralytic (laryngeal), thymic and congenital.

Today we hear the term allergy used. Mention asthmatic bronchitis or bronchial asthma and someone will ask the question, "Is it due to an allergy?" Quoting from one of the text books it could be. The author states the word "allergy" (Walker[3]) is generally used to designate all the conditions in the human that are caused by protein sensation or anaphylaxes.

However, in the study of the relation of sinus diseases to broncho-pedmonacy diseases we must consider the protein, or, if you please, the sensation type. In connection with the bacterial type, the protein type, the cutaneous tests are usually positive while in the bacterial the cutaneous test is negative throughout.

It has been assumed that there is a predisposition inherent in the nervous system. This may be so, but we have no proof. Whereas it has been observed frequently that many of these individuals subject to heredity have very evident etiological factors in nasal polypi, suppurating sinuses, etc. From this it would appear that the essential inheritance has been an anatomical or functional predisposition to affections of the upper respiratory tract. This makes it especially important to favor in every possible way the development of the upper respiratory tract in children who might be expected to inherit this tendency.

In the sensation type (hay asthma) we have the irritant entering the nose. The results of this irritation is swelling of the nasal mucous membrane and pressure of the terminal nerve filaments to such an extent that the reflex stimulation of an inflamed nasal mucosa results in a stimulation of the constrictor fibers of the vagus, causing the muscular fibers of the bronchioles to contract.

Bacterial type (Silleren[4]), pathogenic microorganisms are nerves continually present in normal sinuses, the mucous membrane under ordinary conditions being able to render inert and expel germs (1) by the action of the cilia of the mucosa which continually waves toward the sinus ostium, (2) by the secretion of the glands situated in the mucosa which possesses a decided inhibitory power to further growth of the invading germ. Both of these conditions must be overcome before infection of the sinuses can occur.

There are four diseases which frequently invade the sinuses: (1) influenza, the most potent factor; (2) croupous pneumonia; (3) diphtheria; (4) erysipelas.

Diseases of the accessory sinuses as a factor in producing broncho-pulmonary disease is no longer a question of doubt. Many of the early writers recognized this fact, as they state in their articles on asthma as being due frequently to some pathological condition in the nose and upper respiratory tract. However, it has been left to some of our recent investigators to prove this and up to this time it is still a subject for much investigation as to how diseases of the nose and accessory sinuses precipitate bronchitis, bronchiectasis, asthma, laryngeal and tracheal diseases.

As stated elsewhere bacteria is not found normally in healthy sinuses. Although plentiful in the vestibule of the nose, if we have nasal obstruction which must be pathological in character we do not have perfect ventilation, circulation and nerve stimulation in the accessory sinuses. Therefore, we do have a lowered resistance in the lining membrane of the sinuses which is susceptible to bacteria such as that found in influenza, pneumonia, erysipelas and diphtheria.

The painstaking experiments of Mullen and Rider brought to our attention the simultaneous lesions and pigmentation of the antra and lungs after the injection of India ink into the maxillary sinuses.

This alone should suggest to us that when there are symptoms of tuberculosis present we should not forget the possibility of an existing sinusitis. While it is true pulmonary tuberculosis usually begins in the apex of the lung and sinus infections produce lesions of the peri-bronchial glands, and the lower portion of the lungs. The two diseases may be present in the same individual, and should such an individual receive the best possible treatment for tuberculosis and sinusitis left untreated, the period of recovery necessarily would be prolonged.

Asthma is a disease of early life and the symptoms complex, many times the same as that of pulmonary tuberculosis, and a differentiation should be made so that the patient may receive the proper treatment. It has been my privilege in the past few years to have examined several cases where there were present all of the early symptoms

of pulmonary tuberculosis which after an examination proved to be an infection in one or more of the accessory sinuses. The diagnosis can only be made by elimination. I am of the opinion that in this type of infection where we have the afternoon temperature, the loss of weight, the asthmatoid wheeze, the lassitude and the presence of an infected sinus, the disease is of the bacterial type, as I have not seen one case of the strictly speaking protein sensitization type, but have encountered in not a few cases the presence not only of the bacterial type but also one or more of the allergic or anaphylactic type present.

The diagnosis of asthma is not an easy one. We must then necessarily resort to a careful case history. Look for focal infections. Make use of our allergists if we do not know the routine of the sensitization tests. X-ray the chest and sinuses and teeth if suspicious. Transillumination is of value in some cases, exploration of the sinuses by washing and culture the bacteria. When bacteria are found, it is well to have a selective vaccine made for future use, should you have to resort to surgery of the sinuses. Treatment: Remove the cause. Improve their physical condition; insist on a good nourishing diet, moderate exercise. Remove as far as possible all mental and nervous strain. These people are usually of a highly nervous temperament.

Medically we should prescribe only such drugs and at such a time best suited for the individual case. I make this last statement because I have seen cases whereby the attack was controlled by blocking the sphenopalatine ganglion, and complete recovery brought about by the use of normal salt and sodium citrate irrigation of the nose and sinuses.

AN END RESULT STUDY OF JOINT TUBERCULOSIS CONSERVATIVELY TREATED

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A recent article by Albee on spinal tuberculosis begins with the words: "It is axiomatic in orthopedic surgery that an advanced destructive tuberculous process in a joint can never be said to be cured except when ankylosis has occurred." At about the same time Cleveland and Pyle, writing of the economic aspects of the treatment of tuberculosis, give as their first conclusion: "Operative fusion in joint tuberculosis offers the quickest and most effective means of restoring the patient to his normal life." Sweeping statements such as these come as something of a shock to those of us who were brought up to believe that surgery on a tuberculous joint is fraught with tremendous danger of exacerbation and dissemination. We have believed that the less one did to such a joint the better for the patient's eventual outcome and that a live patient with a sore or deformed joint was better than a dead one. Indeed, I saw a hip case presented to a medical society not long ago with just that philosophy. The presenting doctor specializing in tuberculosis was proud of his achievement of getting his patient up on crutches with a ninety-degree flexion deformity, five degrees of painful motion and a hot, thickened joint. He felt that his patient was lucky to be alive and that any treatment directed at the joint likely would have been fatal. I know perfectly well how Albee would have treated that man—immediate traction in the line of deformity until muscle spasm had subsided and the hip was as straight as could be, then a fusion operation, six months' fixation and then such osteotomies as might be necessary to get his foot under him. Which is right, the group typified by Hibbs and Albee, or the conservatives? Obviously, the results tell the story. Now it is difficult to know the end results of joint tuberculosis because of the chronicity of the disease. Only the white-haired among us have followed cases from inception to cure or death, and, as nearly all chronic cases do, they tend to wander from clinic to clinic and from doctor to doctor so that we are apt to see the beginning, the middle, or the end of any case, not the whole picture. The fusionists are beginning to give us end result studies (though I think often they are not really end results), and are claiming great things. It is unfair, however, to adopt their methods without knowing the other side of the picture. It was in order to know the other side of the picture that I made the end result study reported here. I entered this study a skeptic and came out a fusionist because the results of the conservative treatment are so bad that any reasonable form of treatment could hardly be worse and might well be better.

The method of the study was to hunt up the records on all cases indexed under spinal or joint tuberculosis at the Robert W. Long Hospital since its opening in 1914. Each record was studied carefully and its essential data transferred to a special form. To each of these cases was sent a letter asking for a personal interview and examination. To those who did not respond was sent a second and then a third letter to the same effect. To those who did not agree to come in was sent a questionnaire asking for rather detailed information about their hip or back or knee. Many answered the questionnaire and several sent long rambling letters from some of which information could be extracted. Many letters were returned by the post office stamped "deceased" as our only information. What tragedies lay back of that curt word we could only guess. On the other hand I was rather surprised at the number who came in and at their pleasure to find that the hospital had not forgotten them. I believe that such studies are welcomed by the patients and could profitably be made more frequently.

There were in all 222 records listed of which I excluded eighteen at the start because of obvious error, or because too recent. Filing clerks for instance do not always distinguish between Pott's disease and Pott's fracture. Of the remaining cases no trace could be found of 92, leaving in all 110 about whom definite information is at hand. For the purposes of this report I am further excluding 9 cases, in order to concentrate on three sites, the knee, the hip and the spine. That leaves 101 cases for your consideration. Of that number 31 came for examination (all were seen by me personally), 25 answered by letter or questionnaire, and 45 were found to be dead. That forty-five percent death is already an ominous note though in those cases in which the cause of death could be inferred intercurrent infection was the chief factor. Let me analyze these cases according to the location of the tuberculosis.

There were 38 spines, of whom 23, or sixty-three percent, are dead. These had an average onset at twenty-one with death at thirty-two and one-half years of age (eleven years of diseased life). The 15 living had an average onset at the same age but had lived not quite as long since onset. The present state of the living is 2 totally disabled, 7 partially disabled, and 6, or fifteen percent, who are carrying on a full life. But even these all have deformity and all have pain. Sixty-three percent dead, twenty-two percent disabled, fifteen percent cured with pain and deformity.

Of the hips there were 48, of whom twenty, or forty-two percent, are dead. The fatal cases had an average onset at twenty and lived five and one-half years. The 28 living had an average onset at eighteen and have lived fourteen years. Of these it was possible to make a more objective study than of the spines because the function of the hip is more easily measured than that of the spine. I will spare you the figures on shortening, atrophy, flexion and other deformity, and motion in the various directions. Suffice it to say that 2 are totally disabled, 25 are partially disabled and only 1 is apparently normal, though 8 declare that their physical disability does not interfere with their earning power. That one case that seemed a perfect cure interested me. He is a college track athlete and his present x-ray shows a perfectly clear, smooth joint but an abnormally short femoral neck. I was fortunate enough to be able to see his original roentgenogram, a glass plate taken in 1915. I could not see in it any evidence of tuberculosis or any other joint disease. I should have liked to exclude him as a mistaken diagnosis, but I had decided not to set up my own opinion as the criterion and to exclude only those in which the error was obvious. We have then in the hips 42 percent dead, fifty-six percent disabled, 2 percent cured without disability.

There were 15 knees, of whom 2, or thirteen percent, are dead. There were too many lacunæ in the records for accurate estimation of the average age of onset and duration of life. As nearly as could be told the onset was much earlier and the patients do not recall with reasonable approximation when their disease began. The present condition of the living is 1 totally disabled, 12 partially disabled, none cured without disability, though 8 say they suffer no economic disability. The record is 13 percent dead, 87 percent disabled. Again I have spared you the detailed figures on shortening, deformity, limitation of motion, etc.

To recapitulate the whole series of 101, 45 are dead, 55 are disabled, and 1 is cured without disability.

As to the methods of treatment of these cases it cannot be said to be entirely consistent through the fourteen years except that none were fused. In general external fixation of appropriate type was applied and maintained with fair perseverance. If it be objected that the conservative methods were not used as well as might be in a number of cases I can only respond that in general the treatment was carried out a vast deal better than can be accomplished in anyone's private practice. In the main these cases were under the care of one man, now dead, whose experience in the care of joint disease transcended that of anyone in the state. We can be sure that whatever breaks in treatment occurred would occur tenfold under the ordinary circumstances of private practice. That is indeed the weakness of the conservative method of external fixation, the time involved. Many of these cases were in the Long Hospital more than two years and in such a time what chances there are for broken casts, for outgrown or mislaid braces; for restive patients demanding to go home where the chances of indiscretion are increased manyfold.

For the results of the operative fusion type of treatment I refer you to the works of Hibbs, Albee, Kidner, and others. I am not trying to make a contrast. I am trying to say that the results of the conservative methods of treatment of joint tuberculosis are so bad that we should hunt diligently for a better.

TABLE 1

222 CASES OF BONE AND JOINT TUBERCULOSIS CONSERVATIVELY TREATED

	SPINE	HIP	KNEE	MISC.	TOTAL
Examined	8	17	6	4	35 (32%)
Answered questionnaires	4	6	6	0	16 (15%)
Sent letters	3	5	1	1	10 (8%)
Reported dead	23	20	2	4	49 (45%)
Definite information concerning	38	48	15	9	110
No answer	15	22	6	9	52
Not located	19	12	4	7	42
Total	72	82	25	25	204
Records excluded					18
					222

TABLE 2

PHYSICAL CONDITION OF THE 17 HIP CASES EXAMINED

Deformity:		
Shortening	15—Average	2¼ inches
Atrophy	13	
Flexion	15—Average	45 degrees
Ab—or adduction	13—Average	30 degrees
Rotation	6—Average	30 degrees

Motion:		
Full flexion	2	
Restricted flexion	10—Average	40 degrees
No flexion	5	
Ab—or adduction	12	
Rotation	10	

TABLE 3

PHYSICAL CONDITION OF 13 KNEE CASES EXAMINED OR WHO ANSWERED QUESTIONNAIRES

Deformity:		
Shortening	11	
Flexion	10	
Amputated	1	
Motion:		
Full motion	0	
Restricted motion	12—(Greatest amount 15 degrees)	
Lateral instability	4	

DISCUSSION

E. VERNON HAHN, M.D. (Indianapolis): I am interested in the similarity between the fixation treatment of joints affected with tuberculosis and the functional rest treatment of patients with pulmonary tuberculosis, with which I have had a great deal more experience than with joint tuberculosis. I am interested in the great reluctance with which many people view a permanent abandonment of function of a lung affected with tuberculosis. It seems that this is one of the great difficulties in the treatment. Statistics already show evidence that total paralysis of the diaphragm on the affected side, or thoracoplasty, will allow many patients to make essential recovery who otherwise will not recover. I believe from my observation of the results with joint fixation that the same holds true. We must not be so reluctant about the abandonment of functional use of a part that is affected by tuberculosis. I see no reason for conservatism or radicalism in the subject at all. It is not a question of being conservative, it is a question of being right. The man who advises conservative measures as opposed to the most effective procedure strikes me as making an error of judgment. He may devote a great deal of energy to the function of the joint—and lose the patient's life. The main consideration is the integrity of the individual; a minor consideration is the function of the joint. The general principle that tuberculous lesions heal more rapidly and permanently when function is arrested seems well established.

Examination of the results, as Doctor Milliken has done, is the only scientific way to guide one's self as to the proper method of treatment.

The other side of the story, the results obtained by joint fixation, I am not prepared to discuss because I have only a scant knowledge of what has been accomplished. My impression is that Albee and his followers have been able to show cures with the abandonment of function in the affected joint.

All of us have seen these patients with tuberculosis of the spine, with draining sinuses. The end results of so-called conservative treatment should convince us that any man who is courageous enough to find a means of curing these patients with joint tuberculosis is justified in his attempt.

E. B. MUMFORD, M.D. (Indianapolis): The hypothesis which Ely presents with regard to tuberculosis, especially of bones and joints, is one that I have found very useful in regard to treatment and prognosis. The first thing he points out is that you have tuberculosis occurring only in those tissues which have a certain type of cells. This means that it must be an epithelial, epithelioid, or lymphoid cell. If not, you probably will not have tuberculosis of that tissue; in other words, you do not have tuberculosis of the fatty or subcutaneous tissues, or tuberculosis in scar tissue, or in a low grade type of tissue. That explains why tuberculosis occurs at the end of the bones rather than in the shaft, because in the shaft you do not have the type of cells necessary for the growth of the tubercular organism.

The next thing he points out is that reaction of the body to the tubercle bacillus is just the opposite of that to the ordinary pyogenic infection; in other words, the blood cells which are brought into the field of the tuberculosis reaction are largely those of the lymphoid types which are the giant cells which create a low grade of fibrous tissue. While, on the other hand, the pyogenic organisms bring into the field the cells on which the tubercular organisms live. That explains why secondary infection in tuberculosis is so destructive, because you have a constant flooding of the tissues with the cells on which the tubercular organism lives.

The third point he brings out is relative to the treatment of tuberculosis. The cure of tuberculosis depends upon the formation of fibrous tissue. Tuberculosis will advance until fibrous tissue has been formed. Any cell that has special function will undergo a change (he calls it regressive change) until you have through disuse a fibrosis and low-grade type of cell. Doctor Hahn will tell you that in those individuals in whom he does a pneumothorax, while it collapses the lung, it arrests its special function and develops a fibrosis. The same about the joint. Putting a joint out of function tends to the development of fibrous tissue. Therefore, the cure of tuberculosis is rest and disuse so that nature may exert a reaction by the formation of fibrous tissue. Whether you get fixation through splints or operative procedure is a matter of opinion in the particular case.

I have thought that that hypothesis—it is nothing but a hypothesis, not proved of course—might give you a working basis for the treatment of tuberculosis.

TRENDS IN MODERN MEDICINE*

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It is a very interesting thing to observe a great number of doctors at work and to compare their methods of doing things. We still hear much

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about the old family physician. I have had the opportunity of knowing several of them and can voice my appreciation of their sterling characters, devotion to duty and fine influence in the community and family. But I have concluded that man for man the doctor of a generation or two ago was the same in character and devotion to his profession as the doctor of today—if the old doctor came back today he would be as excited and eager for new methods and new facts as are we. He would be much happier to give an injection of antitoxin than to retain his classic pose of helplessly watching a sick child.

While in the past twenty-five years more has been done to develop medical science than in all the preceding centuries, the type of man who becomes a doctor has not changed much. Doctors as a class are very remarkable people or they could never have kept their heads through the kaleidoscopic period of scientific development. Fortunately they have been helped in this by the wise policy of our medical schools that have raised steadily the requirements of premedical education and are insisting more and more upon sound training in the fundamental branches of science.

An increasing number of brilliant young men and women are attracted to medicine and they bring with them exceptional preparation in one or more of the sciences. They have come with that thing which Doctor Hill so happily terms the "comradeship of science" (A. V. Hill, *Jour. A. M. A.*, Nov. 8, 1930) which brings physics, mathematics, chemistry, physiology, biology, anatomy and medicine together on a mutually exciting hunting ground.

As a result of this intensive study by trained research workers and the increasing speed of scientific development, discoveries in medicine have occurred with such rapidity that one may not take a vacation without hurrying home to learn what new thing has been found out. So vast has the literature become that to neglect reading for a year or two would make one incapable of understanding it. Yet as the physician has changed the scientist in pure research has changed equally. The research worker has become first of all a teacher and recognizing that "the pursuit of knowledge for the welfare of the race is one of the greatest agents of good will among men in every land" he has been eager to adapt his results to the clinical needs of the practicing physician.

It is to the everlasting credit of the medical profession that so many of its members have prepared themselves to utilize intelligently the results of pure scientific research. Almost daily we find doctors, even those of advanced years whose early education gave no smallest preparation for such work, applying successfully to their clinical problems methods and formulæ which have been derived and developed by investigators in special fields and handed over to us in simplified and practical form. So often does this happen that of late years much protest has arisen against the over-use of the laboratory and the decline of clinical observation. It is true that some men have capitalized mechanical apparatus as diagnostic and therapeutic short-cuts, but this is not very important and will soon cure itself. No man may succeed or continue in the confidence of his patients who neglects sound, clinical methods of investigation. Moreover we must recognize that some of our formerly valued clinical signs have been disproved when analyzed by exact scientific methods and others have been so elucidated and simplified as to assume a positive and final value formerly lacking in clinical analysis. Above all the modern advance of medicine is simply that of the application of known physiological laws to the things that we see, but we must be very careful that we see accurately.

The physician today must recognize that scientific progress has been so rapid that no one can know all subjects. Indeed so specialized has knowledge become that no one man may master any one branch. Yet he must so prepare himself that he can make accurate and intelligent application of the findings provided him by workers in more limited specialized fields. He must constantly utilize information derived from physiology which in turn has required the help of physics, mathematics, chemistry and biology. He must know and apply in the light of his clinical knowledge, for example, a good deal about the chemical constituents of the blood as well as of its cellular elements. From this he learns a great deal about the ability of the kidneys to eliminate waste products and something about the liver and lungs. From such examinations he also learns much about the general nutrition of the body and its ability to use certain foods in proper proportions and he may easily determine the total nutritional requirement of the body in varying states of age and activity.

It is interesting that blood examination alone provides the most valuable guide in any given case as to the seriousness of obstruction of the bowel and to the degree of diabetic acidosis and coma. Study of the blood serum has long been used to show the body's immunity to certain diseases and this is in constant use in the diagnosis of a number of diseases, notably typhoid fever, undulant fever, tularemia and syphilis. The information gained from the cells of the blood is of inestimable value. Recent years have seen an understanding of anemia that in itself is one of the most exciting chapters in medicine, leading as it has to knowledge of the stomach and liver as well as of other body cells that was undreamed of a few years ago.

The clinician need not become an expert in x-ray interpretation, yet it is essential that he have some knowledge of its underlying principles; likewise the roentgenologist need not be expert in the underlying principles of physical diagnosis, yet a mutual exchange of knowledge is essential to clinical interpretation. The applications of x-ray

to diagnosis have become so numerous and so exact that time does not permit their enumeration. Roentgenologic study of the chest and abdomen alone furnish sufficient examples of the value of this science.

Fluoroscopic study of alimentary motility based on known physiologic principles has contributed more than all former methods to our clinical knowledge of digestive disorders and roentgen study of the chest, when co-ordinated with physical findings, has become priceless in the interpretation of respiratory disorders.

Particularly is this true when by serial films, taken at intervals over a period of months or years, tuberculosis may be followed with exactness. Of equal value has become the x-ray study of a great group of respiratory infections, more intractible than tuberculosis, and in many instances of more serious prognosis. In this group fall those cases of chronic or recurring disseminated or focal inflammation of the bronchi; bronchioli or alveoli which eventuate in recurring attacks of pneumonitis, fibrosis, bronchiectasis or the "asthmatoid" states. These studies coupled with the newer bacteriologic and anatomic findings will hasten our understanding of the common cold and winter cold.

Other aids from the clinical and physical laboratory in daily use are too numerous to mention. The practical application of each of them is predicated on a sound knowledge of the normal and abnormal chemistry of the body fluids and secretions. Such studies of the excretions, digestive juices and of the spinal fluid are in constant use and determination of differences of electrical potential in the heart muscle by means of the electrocardiograph lends aid to clinical cardiology. The past five years have shown advances in bacteriology which point to this as the next great direction of medical advance.

As clinicians our adoption of all of these methods must be justified by a sound knowledge of their derivation and their logical application for the welfare of the patient. The question naturally arises in view of the intense activity in medical investigation as to what evidence of progress may be shown as its result. Mortality statistics of value, as indicating prolongation of life and reduction of death rate in certain diseases, are difficult of interpretation and often misleading. An experienced pathologist may at autopsy trace in the body a succession of disease events of many years' duration—terminating in death. So may an experienced physician recognize the single disease stated as the cause of death as simply the terminal event in a long succession of disease complexes usually designated as pathologic entities. Yet all are in reality simply anatomical manifestations of the same disease, curable or preventable at some time in its history had we but had the insight and foresight to interpret it properly.

Disease in any organ of the adult body is a mixed disease as a result of many years of life. As Sir James Mackenzie has so aptly said, "It may seem a bit forced to trace deaths from Bright's disease back beyond the chronic or secondary disease which eventually is the cause of death, to an original infection which was really the starting point of the trouble. And yet we are justified doubly both from the standpoint of scientific classification as well as from the standpoint of prevention and therapy in so doing."

It is impossible as yet to do more than attempt a very early trial balance in evaluating the newer methods of medicine. Perhaps a generation must pass before their effects can appear in terms of mortality tables as they are constructed at present.

The increase in the average age of man from twenty years in the sixteenth century to fifty-eight years at present has been due largely to control of epidemic disease by those engaged in public health work. It is interesting that the success of this work again has had its foundation in the broad application of the results of abstract scientific research. The control of epidemics has depended upon the wholesale use of discoveries by bacteriologists and immunologists who have found out the causes of disease and above all to their knowledge of the modes of transmission of the acute infectious diseases.

Many diseases have been reduced in incidence, some through improved methods of living; that is, by betterment of food, housing and transfer to more suitable climate, exactly the methods employed by primitive man against his enemies of famine, thirst, exposure and wild beasts. A very few diseases have been controlled through development of the body's own resistance or through specific sera as in the case of diphtheria and rarely a disease may be overcome by chemical agents as in malaria and early syphilis. Yet no epidemic disease ever known has become entirely extinct.

Much of this saving of life has been accomplished by discoveries in the laboratories of our own public health service. The reduction of death rate and prolongation of life today is based chiefly upon a rarely intelligent police work directed and operated by finely trained scientific men.

While the credit for prolongation of the span of human life belongs for the most part to those engaged in the control of wholesale infection, the search for the cure of disease must henceforth proceed along entirely different lines. It is an interesting fact and one that has escaped notice largely that, with the notable exception of cancer, almost every procedure of the modern clinical laboratory has to do with the investigation of some pathological lesion which may be traced to chronic infection. In this direction lies our hope of further control of disease.

It has been estimated that from eighty to ninety percent of all deaths are due to some type of infection and the acute or specific infections are responsible for but a small part of these. Civilized man now becoming more nearly protected against the great destroying plagues of the past has in

twenty-five years begun to realize that he dies from his own chronic affections. Ill health is as good a name as any for this state. The term focal infection has come, through the ministrations of our popular humorists, to mean disease of the teeth and tonsils and thereby as in the case of high blood pressure has arisen a popular cynicism which to my knowledge has been responsible for a number of tragedies and which in the total must be enormous in number. In passing it should be observed that the medical profession itself has become much too complacent in the matter of chronic infection. It is a characteristic of human nature that we fear that which we cannot understand. Once the mysterious has been explained we grow careless. Thus we still have smallpox, which is an entirely preventable disease; not all fatalities from diphtheria are due to ignorance, and we certainly see greater carelessness today as to contact with tuberculosis than was apparent ten years ago, and why should this not be true, since the people have found that the disease is curable? Just so we have become a little indifferent in our study of chronic infection. Acute dramatic disease is more exciting and challenging to us than are these chronic ailments.

The analysis of chronic invalidism and of even greater importance the prediction of that condition is no task for the professionally lazy. Once one grasps the fact that the chronically complaining patient is describing not trivial, unrelated symptoms but is attempting to recite to us early chapters in the book that ends alike for eighty percent of the people, the task becomes a fascinating one.

Since the work of Billings and his co-workers followed by that of Rosenow and his pupils and by a large number of later brilliant investigators of this subject, it is astonishing to note the revival of hopeful interest in a great group of diseases which had come to be regarded as inevitably beyond our help and the treatment of which had fallen gradually into unscientific or unscrupulous hands.

This group includes that oldest of all known diseases, chronic arthritis, as well as rheumatic arthritis, with its serious cardiac and nervous complications, and is perpetuated by focal residence of its bacterial cause.

This focus may be found easily within the oral cavity or exhaustive search may be required in the lungs, gall bladder, appendix, prostate gland or uterine cervix. Probably no more appropriate example can be given of the responsibility laid upon us to search diligently and intelligently for the hidden foci of infection than in the instance of heart disease, which now leads as a cause of death, destroying annually 207 persons out of every one hundred thousand of the population. If we agree that arteriolar sclerosis is to some extent caused by bacterial infection or toxines, then we may reasonably assume that about eighty percent of the cases of heart disease fall into the group which may be prevented, cured or improved through attention to those foci in which bacteria lurk and multiply.

Only by discovery and removal of these foci may we hope to avert or arrest the recurring attacks of rheumatic fever, repeated invasion by streptococci or the insidious advance of aortic syphilis.

What has been said of heart disease applies with equal force to many other organs and systems of the body.

The new ideas of etiological interpretation and diagnosis of respiratory affections have added much to our knowledge. The case was long ago settled for tuberculosis. Recently with better understanding of the paths of transmission of infection from the upper respiratory tract and oral cavity and from the abdominal region, many previously obscure chronic, pyogenic lesions of the bronchi and lungs are interpreted correctly. Bronchiectasis, chronic bronchitis and mediastinal adenitis untreated become important factors in ill-health both through local effect and when acting as foci for further dissemination. Roentgenoscopic examination of the lungs following injection of iodized oil has been of incalculable value in solving obscure problems of pulmonary infection of pyogenic types.

The French army, as early as 1924, after review of a large number of cases of pulmonary disease in the light of x-ray examination of the chest and sinuses, transferred a large percentage from the classification of tuberculous to that of pyogenic infection. With the logical application of this modern bacteriology our enlightenment increases as to many other lesions of the body. Those of the digestive tract, notably of the gall bladder, appendix and colon and probably of the stomach, the kidney and genito-urinary systems, ductless glands and blood-making organs become increasingly understandable. More recently through studies of encephalitis we dare to lift our eyes toward the eventual solution of the great group of psychoses, the origin of which is still obscure.

No discussion of trends in modern medicine, however brief as this one must be, would be complete without some mention of that brilliant chapter in contemporary medicine resulting from the discovery of the vitamins. These substances are indispensable for the maintenance of health. They have their origin outside of the body and are lacking usually in direct relation to our departure from primitive conditions of life and diet. Their deficiency as far as the average problems of the community appear occurs chiefly at the extremes of life and during chronic invalidism. In this latter, the matter with which we are concerned chiefly, the usefulness of any vitamin rests upon our astuteness in detecting minor manifestations of the known vitamin deficiencies. We have no evidence that health can be promoted by the addition to the diet of any more vitamin than can be given readily in the substances which carry them in nature. In the difficult dietetic management of

chronic illness some lack of vitamin may be expected and here the replacement of this by substances carrying vitamin in high concentration is important in maintaining body resistance. There appears, however, to be no justification for their present widespread, empirical application.

We have touched upon but a few of the achievements of modern medicine. Individual contributions to research and clinical medicine are too numerous to mention. Almost daily are unobtrusively announced additions to our knowledge which while small in themselves represent years of patient work. Such contributions may be appreciated only by those in constant touch with medical literature. It is significant that the majority of recent discoveries converge upon the problems of that which we at present term infection.

Our problem then as doctors, if we are to continue the advance toward prolongation of human life, is to further the cooperation between pure scientific research and clinical medicine. But the mere prolongation of life is not enough. Our obligation to man requires that we prolong his life by preventing his ill-health or relieving it.

The achievements of modern medicine are gratifying but in no sense warrant complacency as to our ability to cure human disease. To cure man is to restore his primitive, physical perfection through relieving him of the penalties imposed by his intellectual development. Recognizing the overwhelming importance of infection our efforts must be directed toward the control of his parasitic enemies. For the accomplishment of this our present methods may prove crude eventually, yet even now they seem to point the way. With increasing knowledge of the behavior of bacteria and almost impious studies of the human living cell we may acquire the ability to destroy the former and the impudence to control the latter. Thus we begin to see dimly the path that leads to success. That in the future this path is that of physics and physical methods would seem inevitable.

The application of available knowledge to the problems of the individual patient today must be secured through the cooperation of several or many persons each especially trained in one or more branches of science.

This cooperation already has advanced to a very gratifying degree, yet the best manner of bringing it about remains the most important problem before us and enlists an increasing attention and criticism from the laity. Its solution should be and probably will be found by the medical profession itself.

So traditional and so vital is the personal factor in the relation of physician and patient that its replacement by state medicine or its destruction by group practice can only occur as the result of the inadequacy of the individual physician. Only by our increasing ability to meet the requirements presented by modern medicine can we honestly and reasonably prevent a vast experiment with social medicine which to those having genuine experience in medical practice would seem predestined to result in scientific chaos.

It is improbable that the world will ever again see group practice on the scale to which it has developed within the past twenty-five years. There can be no denying the service to science and practice which has been rendered to these organizations, yet after long observation one must conclude that further development of scientific research and teaching must remain a function of our universities. The immediate care of the sick on the other hand imposes certain limitations upon the physician which by their very nature prohibit the methods of quantity production. I venture to predict that no impersonal clinical organization however efficient or any control by paternal government will take the place of the practicing physician. He it is who should determine the number and extent of special examinations required. His intimate and confidential relation with the patient enables him alone to assemble the results of these examinations into a reasonable, personal application of a purely material medicine to the problems of the individual patient for whose welfare and happiness he is responsible.

FUSIFORM SPIROCHETAL INFECTION AS A CAUSE FOR BRONCHIAL ASTHMA AND OTHER ALLERGIC CONDITIONS*

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Allergy may be defined as a condition of altered activity manifesting itself by characteristic symptoms when susceptible individuals come in contact with substances, usually protein in nature, which produce no symptoms in the majority of people. It is thought that perhaps eight or ten percent of the population suffers from some form of allergic disease.

Since this whole field of clinical allergy is new, the problems concerning it have been evolved only recently. It was in 1906 when Wolf-Eisner[1] suggested the allergic nature of hay fever and 1910 when Meltzer[2] pointed out the possibility that bronchial asthma was a manifestation of anaphylaxis in man, and then Goodall[3] and Walker[4] published reports in 1919 and 1920 which greatly stimulated interest in this work. Since 1920 the development of this field of investigation has been very rapid.

One may say that the more common allergic diseases fall into three clinical groups, namely, the nasal mucosa group giving rise to the familiar hay fever and similar syndrome, the bronchial group and the cutaneous group, which manifest themselves as urticaria and eczema. More recent studies would indicate that certain other diseases,

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namely, migraine, various forms of colitis and especially arthritis are allergic diseases.

There is some hope that perhaps we may eventually isolate a fraction common to all allergins which when applied to the skin will give a characteristic reaction and thus solve the question of the diagnosis of these conditions. In the meantime we must depend largely on the history and careful examination of patients together with such tests as we have available to enable us to make a diagnosis. I think the careful history taking and careful examination of the patient is by far the most important.

I shall discuss a few cases of allergic diseases due to toxin elaborated by the fusiform spirochetal organism. My attention was first called to this in March, 1925, and since that time I have seen a number of cases. I now have records of eight cases of bronchial asthma, three of the nasal mucosa group, one cutaneous and one arthritic. Some of these cases will be reported in detail.

The fusiform spirochetal organism is an animal parasite (protozoa), first described in 1903 by Castellani[5], who was the first to describe bronchial spirochetosis, and since that time has frequently called attention to the prevalence of that disease both in the tropic and temperate zones. He has called attention repeatedly to the frequency with which this disease was mistaken for tuberculosis. Various types of this organism are known to exist and in the present state of our knowledge there is no clear classification, although Castellani has attempted such.

The infection is most commonly seen in the mouth, about gums and tonsils as Vincent's angina, but it may be found in any part of the body. I have found it in apical abscess of teeth, in the sinuses, lungs, gastro-intestinal tract. It has been found in the genito-urinary tract and I have found it in metastic abscess in the brain. It may occur alone or as a mixed infection. Graham[6] says that the organism is found in about seventy percent of lung abscesses and Davis[7] believes that many of the pneumonias, both of the broncho and lobar types, are due to infection by spirochetes. The only reference I find in the literature to a connection between fusiform spirochetal infection and allergic disease is that of Farah[8], Cadbury[9] and Fernandez and Carri[10], although neither of these authors consider this as an allergy and report their cases as the asthmatic type of broncho-pulmonary spirochetosis. I have not been able to find any reference of a connection between this infection and the other allergic conditions such as I have seen, urticaria, nasal mucosa irritation and arthritis.

Geo. F., age forty-four, superintendent iron foundry, March 11, 1925. Chief complaint, dyspnea, asthma. Can't walk any distance without shortness of breath and cannot lie down on account of asthma. Until three months ago was very healthy and had not consulted a physician since childhood. He had an attack of "flu" in January and this condition has followed. He has to cough frequently. The cough is metallic and rarely productive. At times he gets "blue" and his nail beds are always bluish in color. There is a continuous loss of weight. His top weight six months ago was 218 pounds; he now weighs 188. His appetite is fair. There is no temperature. There has been some pain in his chest. The heart rate is quite fast as a rule. He worked until a week ago.

Physical examination revealed nothing except typical asthmatic findings and *marginal gum* infection with moderately infected tonsils. X-ray examination of sinuses showed some clouding of antra and were negative for definite cardiac, lung or mediastinal pathology. Blood picture at this time was relatively normal. Wassermann negative. Urine was normal.

He continued to get worse and in September, 1925, went to a well-known group who sent him home with a hopeless prognosis and suggested extensive pulmonary tuberculosis. At this time he was bedfast, weighing 135 pounds and taking adrenalin every three or four hours to live. It may be noted that the tonsils were removed early and radical antrum drainage had been done.

In September after the patient returned home I made several attempts to find tubercle bacillus in the sputum. On two occasions I found fuso-spirochetal organisms in some of the small particles of debris in the sputum. On a basis of this finding I administered small doses of neoarsphenamine (.03 gm.) at intervals of three days with the result that the patient began to have fewer attacks of asthma and within a few days no longer needed adrenalin. Within ten days the weight began to increase, the improvement was rapid and by November he had resumed his work in the foundry. Small doses of neoarsphenamine were continued at weekly intervals for three months. A thorough dental prophylaxis was made. This man has continued at his work since 1925 without return of symptoms.

Mrs. H. H., age fifty-eight, married, farmwife, Nov. 15, 1925. Chief complaint, asthma, which may be present at any time of the year, but is most common and troublesome in the winter. She is fairly free of trouble during the summer season unless she goes where the dust is heavy. She "takes cold" easily and it is usually an upper respiratory infection which precipitates an attack of asthma. She began to have asthma at age twenty-three and it has been with her nearly every winter of thirty-five years. She is not sensitive to plant pollens., From all the evidence the only foreign substance that seems to cause her trouble is dust and smoke, which will always make an existing attack worse.

Physical Examination: She is 58 years old, 62 inches tall, weighs 130½ pounds. Head, eyes, ears are essentially normal. Nose—mucus membrane is thick, edematous. Right middle and inferior turbinate has been removed. There is a muco-purulent posterior drip. Pharynx is con-

gested and mucus membrane thickened. Tonsils are buried. Pillars are thickened. All teeth are extracted. Heart—apex beat inside the nipple line. Rate is 90. Blood pressure is 130/70. Otherwise negative. Chest—typical of chronic bronchial asthma with some emphysema. There is some pain under the shoulders and a moderate cough which is non-productive. Abdomen is normal for woman of this age. There were some varicose veins in the legs and small hemorrhoids. Laboratory findings—urine, gravity fixed at 1.006. A few hyaline casts in each specimen. Blood—erythrocytes 4,032,000, leucocytes 6,900, hemoglobin 70%, polys 68%, lymph 22%, eosin 8%, trans 2%. Wassermann and Kahn negative. Sputum—fusiform spirocheta positive. There are a few mixed bacteria. Skin tests for food, dust, epidermal, bacteria, etc., all negative.

At this point this patient was given .03 gm. doses of neoarsphenamine at four-day intervals. She became free of asthma in a few days. The intervals of arsphenamine administration were increased to one week and continued thus for three months. She has had no further attacks of asthma since 1925.

DISCUSSION

HAROLD OTIS WILLIAMS, M.D. (Kendallville): As Doctor Baker has just said, the literature bearing directly on this subject is very scarce. I have found, however, a few reports that are indirectly related, which I think should be brought out in connection with this paper.

According to Doctors King and Dacey, in the *New England Medical Journal* of May 17, 1928, there are now numerous reports of the almost constant presence of a spirochete, of the Vincent type, and the fusiform bacillus in certain pulmonary infections. There is almost constant presence of these organisms in the sputum of persons suffering from pulmonary abscess, chronic bronchiectasis and pulmonary gangrene, but one can find very little in the literature in support of the contention that these organisms are absent in the sputum from pulmonary conditions other than those just mentioned.

Smith reports that the sputum in 150 uncomplicated cases of pulmonary tuberculosis showed neither spirocheta nor fusiform bacilli. He also reports their absence in the sputum of six cases of bronchial asthma, and five cases of mycotic pulmonary infection.

Thompson, of England, reports spirochetes in thirty-nine out of seventy-nine cases of soldiers invalided home from Salonica because of chronic malaria. These men all had cough and much sputum but absent or insignificant chest signs.

Sinclair reported 410 Filipino patients suffering the same way and found fusiform bacilli in 256 of these 410. When these occurred in a tuberculous patient, the tendency to hemorrhage was greatly increased.

Kline and Berger report sixteen cases of pulmonary or pleuropulmonary spirochetosis in two years at Mount Sinai Hospital, Cleveland.

Smith, of New York, reports three cases of fusospirochetal disease of the lungs that followed contact with cases of Vincent's angina.

As to treatment, many cases respond to neosalvarsan and careful hygiene of the gums.

ROBERT V. HOFFMAN, M. D., South Bend: Several investigators list 300 to 700 case reports, and I have read some of them, but never was I so much impressed as by these two case reports that have been so thoroughly worked up.

My experience with arsphenamine in fusiform spirochetal infections has not been so favorable. As everyone else seemed to have favorable results, I wrote to several men over the country and analyzed their replies. I was mistaken regarding the efficacy of arsphenamines. These men have found them, almost without exception, of great value in these infections. I did not know that bronchopneumonia came from these infections as an allergic phenomenon, but if so it would be well to sound a word of warning not to use any arsphenamine in these cases. There are certain to be some very bad reactions. The drug might serve to eliminate the infection and the patient at the same time.

H. M. BAKER, M. D. (closing): If I left the impression that pneumonia is an allergic reaction I am sorry, and wish to correct it. In describing the organism I simply stated that Doctor Davis told me that in his opinion many cases of broncho and lobar pneumonia are due to direct infection of the lung with this organism. I have seen it in a number of instances postmortem, and in these instances it was a direct invader.

In regard to the arsphenamines, there is no doubt that certain of the arsphenamines are not as effective in fusospirochetal infections as others. I refer particularly to the sulpharsphenamines. For some reason that has not been explained we do not get the specificity with sulpharsphenamine in these infections that we do with the others. While various drugs have been advocated the arsenicals offer the best means now at our command of treating this infection.

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DIET AND THE PRE-SCHOOL AGE CHILD*

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The relation between strong, healthy bodies, sound teeth, and good nutrition is a close one. In fact, proper nutrition is the foundation upon which healthy bodies are built.

The character and value of food requirements vary with the five growth periods of life. They are as follows:

1. Prenatal
2. Infant
3. Pre-school
4. School
5. Adolescent

I wish briefly to consider the pre-school age alone.

If the general practitioner of thirty years ago had been told that within his lifetime infant mortality from feeding difficulties would be reduced to an almost negligible percentage in the better communities, he would have been incredulous. If he had been told that one of the major problems of pediatrics would be how to get children to eat, his incredulity would have been even greater. Yet these two statements are true today.

The science and art of feeding children has advanced so far during the present generation that few need now perish through failure to suit the diet to the child. Whereas within the memory of all of us the mortality rate of infants under one year of age was about seventy percent, now, among our well-cared-for people, the death of an infant from feeding difficulties is so unusual as to be almost a public calamity. The physician, however, is not satisfied with mere reduction in infant mortality, and is now striving through proper hygienic and dietary measures to develop each child to his maximum of physical perfection.

The unexpected factor acting as a check on the attainment of these ideals is the refusal of many children to eat the amount or kinds of food prescribed. One cannot state accurately the proportion of children who present this difficulty. Certainly the increasing number of references to it in the medical literature and in that of child welfare agencies is sufficient evidence of its prevalence. Actual statistics on this point are few. An investigation made under the supervision of the Department of Home Economics of the University of Chicago found among one hundred children in homes of intelligent people only nineteen who ate heartily. At a recent meeting of the Chicago Pediatric Society this subject was thoroughly discussed. It was stated by various men that between eighty-five and fifty percent of the children who came to their offices presented the appetite problem in a more or less marked degree.

All are agreed that among poor people the trouble is far less prevalent. It is rarely encountered among convalescents in hospital wards, and is almost never seen among healthy children in orphanages. But so widespread is the condition elsewhere that the word "anorexia", hitherto a strictly scientific term for poor appetite, is now being used quite familiarly at the afternoon-bridge-table and child-health conferences. It might be remarked that anorexia is not a diagnosis any more than is fever. It is merely a symptom. Today it is not as logical to tell an intelligent parent that his child "has anorexia" as it was in the time of our fathers to say that one had the "fever".

This situation now confronts us. On the one hand are arrayed physicians, parents, and nurses, armed with a knowledge of dietetics with which they think it possible to develop a generation physically superior to any we have yet seen in modern civilized countries. Opposed to this formidable array are the children refusing to eat. A few attempts to force the bottle on an unwilling infant or a bout with an older child who has learned to use the regurgitation weapon when unduly urged will soon convince the most skeptical of the reality and extreme difficulty of the problem.

The result is that over the dinner table parents and children are engaging in countless battles from which the children usually are emerging victorious. Consequently, we find many undernourished children who have developed marked behavior disturbances, and many worried, anxious and worn mothers and nurses, not to mention irate fathers. It is not within the scope of this paper to consider all the facts concerning individual foods or various other factors that are allied closely to the culture of the child's diet; such as heredity, improper home conditions, variations in the psychological make-up of the child, technique of feeding, and proper preparation of foods.

Let us consider briefly the most frequent causes for malnutrition in the pre-school age child.

Causes of Malnutrition:

1. Physical defects—diseased tonsils, etc.
2. Lack of home control.
3. Over-fatigue.
4. Insufficient food and faulty food habits.
5. Faulty health habits:
   - (a) No coffee or tea.
   - (b) No candy between meals.
   - (c) Drink one pint milk daily.
   - (d) Eat cereal for breakfast—eat bread and butter.
   - (e) Eat fruit and vegetables once daily.
   - (f) Eat some of everything on the table. Eat slowly—regular hours.
   - (g) Underweight children may require an additional lunch at 10:30 and 3:30.
   - (h) Rest period of twenty minutes each day.
   - (i) Bed by 8:30.
   - (j) Sleep with open windows.

*Address given before Indianapolis Kindergarten Association on Child Health Week, May 1, 1931.

(k) Get weighed once a week.

It is within the pre-school age that faulty food habits are first started. It is now a generally accepted thing for mothers of all classes of society to give excellent care to their infants during the first eighteen months of life. That is, those who cannot afford private care go to the free feeding clinics, while others are examined at regular monthly intervals by their private physician, who devotes himself to that type of work. Yet how often do we see this interest cease at two years and no thought is given to the child's diet until he reaches school where nutrition is again considered. This period is sometimes called "No man's land." It is during this period that so many faulty food habits begin. In fact, it is such a common condition that it has called for the organization of a special school known as the "Nursery School".

Now as to food itself, we have in the past few years gone through many fads as far as food and nutrition are concerned. We have seen the opposition to canned foods; the terrible warnings of eating too coarse foods, or too soft foods; we see articles in the press warning against the over-indulgence in meats; then another fad which advocates a plain vegetable diet; other articles which hold out the great dangers of *not* consuming one quart of milk a day. The packing houses on the other hand warn you of the danger of too little meat in the diet of the working man. Then comes the latest of all warnings, "Have you been receiving enough vitamins?" and, last but not least, the ever deadly calorie of the adult woman's diet.

All of this of course makes one feel that we are in a lost sea. One would like to close his ears on all of this talk, which is usually gotten out for someone's individual gain. All we have to do in any diet is to see that the food has five essential factors.

Five Essential Factors of Food:

1. Must be clean and free from harmful bacteria.
2. Must be digestible.
3. Must contain proper number of calories.
4. Must contain proper percentage of carbohydrate, fat protein, minerals, vitamins.

For the pre-school child a diet containing milk, green vegetables, eggs, cereal, fruits, and cod liver oil will provide all the essentials of a food.

A model diet for a child two to six years is as follows:

7-8 A. M., Breakfast—Juice of whole orange, cereal, slice of bacon and one egg—coddled, poached, scrambled or hard boiled, toast or bread and butter (two slices). Stewed fruit if orange juice is not given, milk six ounces.

12:00-12:30, Dinner—Lamb or veal chops, roast beef, lamb or veal. Chicken, boiled, broiled or roasted, or fish boiled or broiled. Baked potato or macaroni or spaghetti and vegetables finely chopped, either carrots, green peas, spinach, turnips, squash, string beans, tomatoes stewed or raw, asparagus tips, onions, cauliflower, stewed or raw celery, lettuce. Desserts: Custard, junket, bread, rice, or tapioca pudding, jello.

5:30-6:00 P. M., Supper—Vegetable or cream soup, eight ounces, or macaroni or spaghetti or bread or crackers or toast and milk, sponge cake, stewed fruit, milk, six to eight ounces.

It is of great importance to cultivate proper food habits in the pre-school child. By doing this we will not only do away with personal worries, and malnutrition in children, but will make a more healthy school child who because of his excellent health will resist most acute diseases with which he comes in contact and in turn becomes an economic asset to himself and to his country.

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar April 24, 1931)

PEDIATRIC CASE

(Congenital Ectodermal Dysplasia)

HERBERT CALL, M.D.

I wish to report a patient who presents an unusual type of multiple congenital abnormalities, the tissue affected having been developed principally from the embryonic ectoderm.

Girl, age five years, was admitted to the Riley Hospital March 23, 1931, complaining of enuresis, absence of teeth, scanty hair and frequent gastric upsets.

Enuresis has been present from infancy, the child seemingly never developing control of the bladder at night. There is no dribbling of the urine in the day time. The patient has never erupted a tooth in her five years of life. She was breast fed during infancy, and did not receive cod liver oil and orange juice. Her diet in later years has been strictly limited by her inability to masticate food. The diet of necessity has consisted of soft materials such as mashed potatoes, pureed vegetables, eggs, finely chopped meats and soft fruits, chiefly bananas. It was thought the repeated gastric upsets probably resulted from repeated dietary indiscretions, because, since the patient has been hospitalized and receiving a suitable diet, she has been free of gastric symptoms. The mother tells us that as an infant the patient had scanty hair, the deficiency being noticed on the body as well as the scalp. The growth of the hair has been exceedingly slow and sparse.

An exhaustive family history was obtained, going back as far as the great-grandparents, without demonstrating any congenital malformations of the ectodermal derivatives or any other of the embryonic tissues.

On physical examination one is struck immediately by the patient's peculiar senile appearance.

She has the facial expression of an elfish old lady, rather than a five-year-old child. Her weight is 37¾ pounds and her height is 43½ inches, which compares favorably with the average for the age, even though the patient is slightly under weight. She stands with a slight lordosis and with some tendency to a pot belly.

The skin is pale, transparent, more or less inelastic and dry. The patient perspires but not as much as the normal individual.

The hair of the scalp is fine in texture and deficient in pigment. The deficiency in hair does not take the form of a patchy alopecia but instead the hairs are diffusely scattered over the head and much decreased in numbers. The body hair is very scanty. It is confined chiefly to the upper lip, the deltoid area, sacrum, anterior aspect of the leg and upper arm. There are a few hairs in the axillary and pubic regions.

The forehead is rather prominent. The nasal ridge is depressed. The lips are rather thick. The superciliary ridges are fairly prominent. The eye lashes are few in number. The hair of the eye brows is scanty and confined chiefly to the medial sides. We could demonstrate no functional or anatomical abnormalities of the eyes or ears. The mucous membranes of the nose and throat presented no evidence of atrophy. Examination of the mouth reveals the absence of any erupted teeth. The alveolar ridges are well formed. There is no demonstrable pathology in the heart and lungs. The mammæ are nearly absent, the nipples are minute and flat. There is but little pigmentation present. The abdomen is negative. There is a slight depression over the lower lumbar and sacral areas. The nails of the hands and feet are normal. The reflexes are normal. There is no abnormality of the mucous membranes of the anus.

Laboratory examination included: negative blood and spinal fluid Wassermann and negative Gold curve. Routine blood and urine examinations revealed no abnormalities. Nose and throat cultures were negative. Vaginal smears were negative. The gastric contents were normal; stools normal.

Roentgen ray examinations revealed the following: A. P. and lateral films of the lumbo-sacral spine gave evidence of incomplete bony fusion of the posterior laminæ of the fifth lumbar and first sacral segment, with no evidence at all definite for bony development of the posterior laminæ or in the sacrum below the first segment. Just to the right of the last sacral segment is what appears to be an anomalous bone of small size. A lateral film of the dental areas shows that the lower jaw is completely edentulous. In the upper jaw there are two teeth, one in the right upper cuspid area and one premolar. Both are unerupted.

Congenital anomalies of all the tissues which arise from embryonic epiblast have been reported. These tissues include the epidermis, the nails, hair, teeth, the glands of the skin, including mammary tissue, the external organs of sense as the ear and eye, the nervous system and the mucous membranes of the mouth, nose and anus.

Many papers have been written describing dystrophies of ectodermal tissue, and under as many different titles, such as "dystrophy of the hair and nails", "imperfect development of the skin, hair and teeth" and other classifications. It remained for Dr. A. A. Weech, of Baltimore, to originate a classification and coin a term describing and defining this group of congenital malformations.

In collecting the material for his excellent paper, which appeared in the *American Journal of Diseases of Children* April, 1929, he reviewed all of the reported cases dealing with dysplasia of the teeth, hair, nails, etc., and noted three salient factors: First, that the tissues affected were principally of ectodermal origin; second, that the defects were developmental anomalies, and, third, that the hereditary tendency was strongly developed. To describe this group of congenital developmental failures he coined the term "congenital ectodermal dysplasia." Doctor Weech also noted that cases of this type could be further divided into two groups, *i. e.*, those in which there is an absence of sweat glands in the skin, which he designated as the "anhidrotic type," and those whose sweat glands are normal. The anhydrotic type is extremely rare, there being only eleven cases reported in all medical literature. They are characterized by the delicate structure of the skin, a lack of perspiration and tears, and a marked intolerance of heat.

It is well known that one or more different congenital developmental abnormalities not rarely occur in association in the same individual and, therefore, it is not surprising that one congenital ectodermal defect may be associated with one or more other congenital ectodermal defects and possibly with one or more congenital non-ectodermal defects. I have pointed out the fact that in this case there is not only a developmental failure of the ectoderm as evidenced by the teeth, hair and mammary tissue, but also a developmental failure of the mesoderm as well as evidenced by the presence of a spina bifida occulta. In regard to ectodermal hypoplasia accompanied by congenital non-ectodermal defects, Dr. H. L. Messenger reports a case of a woman, age thirty, with unerupted teeth and no clavicles.

As to the etiology of this condition there is a great deal of discussion. Syphilis is thought to play no part, as it has not been demonstrated in the cases reported. In this patient the blood and spinal fluid Wassermann is negative. The possibility that an endocrine disturbance may be an important etiologic factor is thought improbable. The hereditary factor is a strong one, however, many sporadic cases having been reported.

MEDICAL CASES

(1. Congenital acro-congestion; 2. Erythromelalgia)

EDWARD G. BILLINGS, M.D.

The medical cases for presentation are two: A man, aged fifty-seven, showing an acro-congestion of the toe tips and plantar surfaces of both feet and the finger tips and palmar surfaces of each hand. A woman, aged twenty-one, exemplifying what I believe to be a typical case of erythromelalgia with involvement of the toe tips and plantar surfaces of both feet and the finger tips and palmar surfaces of both hands. I am presenting these cases for comparison.

In 1843 Graves[1] first reported two cases which from his description fell into the erythromelalgic group. Later, between 1872 and 1878, S. Weir Mitchell[2] reported several cases having "vasomotor neurosis of the extremities". He termed the clinical picture that of "erythromelalgia" (derived from the three Greek words meaning red, a limb, pain) and described it as follows: "A chronic disease in which a part or parts of the body, usually the whole or a portion of one or more of the extremities, suffer with pain, flushing and local fever, made far worse if the part hangs down."

He gives four generalities of importance in the diagnosis of such a condition, namely[1]:

(1) The pain or aching occurring usually in hands or feet, having a slow onset and progressive.
(2) The flushing increases when the affected portion of the body hangs dependent and is exercised.
(3) The condition is progressive with pain remissions.
(4) It is resistant to all forms of treatment.

Cassirer, Lewis, Benda[3] and others have reported many such cases. However, according to Osler, such a diagnosis should be limited to cases in which no central or peripheral nervous system lesion can be demonstrated, or any disease of the vascular system found. He says, in some of his writings, that he has seen only one true case of erythromelalgia as described by Mitchell.

As to etiology, little is known. The most accepted theory as to the site of lesion is that it occurs some place in the nervi vasorum. The occurrence is usually coincidental with exposure, infection or toxic states.

Erythromelalgia, as reported, may occur at any age, but most frequently is met with in adult life and affecting men more often than women.

Mr. C. represents the case illustrating an acro-congestion of the hands and feet. He is fifty-seven years of age. This patient first entered the Robert W. Long Hospital on April 18, 1931, complaining of orthopnea and edema of the upper and lower extremities.

The family history is irrelevant. According to the past history he has had the present acro-congestion of the extremities as well as a nocturia since a small child. He had a so-called rheumatism in 1902. He had malaria, between the ages of twenty and thirty, and pneumonia at the age of thirty—otherwise he states that his health has been exceedingly good up to four weeks prior to admission. He has been a heavy drinker of liquor, an inveterate smoker and an exceedingly hard worker. The present illness began five weeks ago with a so-called chill while sitting in a chair, followed by a marked dyspnea which has been present to date. The edema has developed during the past three weeks.

Physical examination reveals a man of approximately 160 pounds with marked orthopnea, pallor of the mucus membranes, slight cyanosis of the lips and nails and marked edema of the redundant portions of the body. His temperature rises occasionally from normal to 100 degrees (F.). The pulse is irregular, of poor volume and varies from 72 to 112. The blood pressure is 185/100 mm. Hg. The pupils are equal and regular and react to light and accommodation. The fundi oculi show a fairly well-marked angio-sclerosis with a few exudates at the arterio-venous crossings.

There is marked dental caries present.

The neck vessels are swollen, congested and throbbing. The lungs are essentially negative except for many wet rales over the hila areas and bases. The heart is enlarged to the left and slightly to the right. The heart sounds are very soft, no murmurs being heard. The aortic second sound is a little loud.

The abdomen is slightly distended, the anterior wall being edematous. The liver margin extends two fingers below the costal margin on the right. It is not tender.

The extremities, particularly the legs, ankles and feet, are quite edematous. There is a marked rubor of the terminal phalanges of all the fingers and toes and a marked splotchy erythema of the palms of the hands and the soles of the feet. There is no particular edema or swelling of these portions other than mentioned, and no tenderness. On elevation the erythema fades slightly, but on hanging the hands and feet downward the color increases. No pain or paraesthesias exist under normal conditions or in any position or thermic condition.

Laboratory findings are negative except for the urine, which shows a 2-plus albumin, many red blood cells and casts.

This case represents an individual fifty-seven years of age having had an acute myocardial failure some five weeks ago, probably a result of a vascular sclerosis and nephritis, and demonstrating a congenital acro-congestion of the distal ends of the extremities.

The second case is that of Mrs. L., white, married, and aged twenty-one, who entered the Coleman Hospital on April 19, 1931, as a prenatal

case complaining of a "cold" and painful, red and swollen finger and toe tips.

Family history is negative.

The past history is to the effect that she has always had exceedingly good health except for the usual childhood diseases, from which recovery was good.

The patient is approximately at seven and one-half months gestation having progressed normally up to the last week. She states that approximately one week ago she caught "cold". At about this time the tips of the fingers and toes and the palmar surfaces of the hands and the plantar surfaces of the feet began to tingle and become red. During the next few days there was an increase in the swelling, redness and pain. The paraesthesias of the terminal phalanges of the hands and feet became so marked that walking and the use of the fingers was nearly impossible. She states that at times the pain abruptly ceases and then recurs more or less suddenly.

General physical examination, with the exception of the hands and feet, reveals only a mild naso-pharyngitis and evidence of a slight bronchitis. There is no evidence of any vascular disease. She is about seven and one-half months pregnant, the fetus apparently in good condition. The terminal one-third of all the fingers and toes are swollen and bluish-red in color. The line of demarcation between the normal color of the flesh and the erythematous finger and toe tips is rather abrupt. These areas are very hyperesthetic and there are paresthesias present, particularly in the great toes and the index fingers. These areas on palpation impart a sensation of pulsation to the examining finger. There are splotchy erythematous areas over the palmar and plantar surfaces of the hands and feet. Elevation of the parts and the immersion of them into cold water produces an objective lessening of the erythema and, subjectively, a decrease in pain. On the contrary, dependency of the parts and the immersion of them into hot water increases the paresthesias, the hyperesthesia, and makes them more swollen and red.

The laboratory findings have all been negative.

In conclusion, Mr. C., the man, presents a picture of congenital acro-congestion which is not altered on posture or on being subjected to thermal changes, and which is not painful—an arterial condition.

The woman, Mrs. L., on the other hand presents I believe one of the clinical pictures described by S. Weir Mitchell as being erythromelalgia.

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PHARMACOLOGICAL AND CLINICAL STUDY OF EPHEDRINE

K. K. Chen, M.D.*

About seven years ago I was called back to China to teach pharmacology in one of the modern medical schools at Peking and since I had much spare time outside of classes and laboratory periods, I decided to study the Chinese materia medica. I made an investigation and inquiry to the native physicians and druggists as to which Chinese drugs were considered most potent and poisonous. In the long list Ma Huang, which is the source of ephedrine, was mentioned. I purchased several samples of the drugs and made them into alcoholic and aqueous extracts. One day I injected a small quantity of the extract Ma Huang into an anesthetized dog which had been left by a group of students after their class exercises. Immediately I observed a prolonged rise of blood pressure. That was the beginning of our study. The pure principle ephedrine was isolated and identified as such. The work of my colleagues and myself has been chiefly devoted to the pharmacological investigation and the clinical application of this now well-known drug, ephedrine.

The plant which produces ephedrine, or the cruder drug, has been known to Chinese medicine for more than fifty centuries, but it has been used mostly in an empirical way. The injection of small doses of ephedrine into experimental animals results in a prolonged rise of blood pressure accompanied by vasoconstriction. In this experiment, which was performed on a dog, when the ephedrine was injected, there was primary constriction of the vessels accompanying the rise of blood pressure. At the same time the strength of the contractions of the heart became augmented. The elevation of the blood pressure after ephedrine is partly due to cardiac stimulation, and partly to vasoconstriction. We also found that ephedrine dilates the pupil and bronchioles, in addition to the effect on the cardiovascular system. All of these facts indicate that ephedrine stimulates the endings, or the myoneural junctions of the sympathetic fibres, in much the same way as adrenalin does.

In men ephedrine will raise blood pressure not only by injection, but also by mouth. The effectiveness by mouth is a special feature of ephedrine as compared with adrenalin.

Clinically, the blood-pressure raising property has been particularly utilized in spinal anesthesia for surgical operations. This case is a good illustration. After the injection of the spinal anesthetic the blood pressure fell below 100 mm. of mercury. At that point we injected ephedrine intravenously, and it brought the blood pressure above the original level, and after the operation the blood pressure still stayed at a higher level than from the start. Surgeons now give ephedrine some time

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before spinal anesthesia, the idea being to prevent the fall of blood pressure.

Ephedrine dilates the bronchioles and thus it has been used for the treatment of asthma. One of our early cases treated with ephedrine was a Chinese man, aged sixty, suffering from bronchial asthma. We took a careful medical history of that man and learned that his attacks lasted from several hours to several days. On October 1, 1924, we found him in an attack. At eleven-thirty we gave him ephedrine sulphate intramuscularly, and ten minutes after the injection the relief was beginning, and fifty minutes after the relief was almost complete. That was also confirmed by objective examination. We repeated that experiment on that particular individual several times, and each time when we gave the ephedrine the attack would disappear in a short time, but if we did not give ephedrine the attack would last for several hours. From some thirty reports on 1,200 cases it has become clear that ephedrine has the ability to prevent the attacks if the drug be given some time beforehand. In other words, it has the prophylactic power. In the second place, ephedrine can stop mild and moderate attacks of asthma, and occasionally severe ones.

In the eye ephedrine has been used as a mydriatic. In our work we find that the addition of a trace of homatropine or some euphthalmine makes the mydriatic action almost ideal, because the light reflex is very sluggish, while the accommodation is not at all affected. There was no indication of intraocular pressure, irritation, nor inflammation. I describe two cases in which the entire course of mydriasis and accommodation was recorded. The maximum dilatation of the pupil in each case was over two millimeters. That dilatation was sufficient for the examination of the nerve head. Although there was an error of about two diopters in both instances, each of the individuals could read Jaeger type No. 2, and none of them complained of blurring of vision. These solutions are, therefore, very useful in the routine examination of fundi in eye clincis and in medical and neurologic wards.

In the course of this work we found a very curious phenomenon in connection with ephedrine in the human eye. Ephedrine has a racial discrimination. In the Caucasian race it efficiently dilates the pupils, but in negroes and Chinese the mydriatic action of ephedrine is much weaker, so much so that it is of little practical value. We extended our study to several other mydriatic drugs and we found that such common drugs as cocaine and euphthalmine behave in exactly the same way. We studied ten individuals from each race for each drug, and our results have been uniform. With each drug there is a difference, and the difference is uniform. There are several possibilities for the explanation of such a difference. Most of them are speculative and without any direct evidence. I shall not mention them here, except to say that this fact is important in the consideration of racial physiology.

As a drug ephedrine has been recommended in several other conditions. In the ear, nose and throat clinic it has been extensively used to shrink the nasal mucous membrane and in the treatment of acute rhinitis. At the Mayo Clinic they use ephedrine orally in the treatment of hayfever. Anderson and Homan have used ephedrine to control the attacks of whooping cough. Both Hollingsworth and Stecher report an interesting case of Adams-Stokes syndrome in which they used ephedrine to control the attacks of syncopy and made the patients ambulatory.

These are the few points that I like to bring to your attention, and I would like to point out some of the differences between ephedrine and adrenalin from a practical point of view. Both drugs act on the sympathetic nerve fibres, and probably at the same place, that is, at the myoneural junctions. This is of only academic interest. Adrenalin is a much more potent substance. For local anesthesia adrenalin is the drug to use because it has much more powerful vasoconstricting action than ephedrine. As a matter of fact, ephedrine injected subcutaneously is rapidly absorbed and should not be used in local anesthesia. In the resuscitation of a heart that has stopped beating, adrenalin is the drug to use because it has a more dominant cardiac-stimulating action. Ephedrine, on the other hand, is a stable compound, much more so than adrenalin. Its solutions can be boiled, sterilized and exposed to light and air without decomposition. Ephedrine can be taken by mouth, and it has a prolonged action on the nasal mucous membrane after local application. The skillful physician, therefore, will make discrimination in using these two drugs.

ETIOLOGY OF RENAL CALCULUS

H. G. HAMER, M.D.

Urine always is a strongly super-saturated solution, the salts in solution in a strength many times that obtainable in water. This increase in solubility in urine of sparingly soluble salts is due to the presence of the colloids, and has been termed protective action. If this protective action is diminished or lost, deposit of crystals occurs, and, if retained, may result in formation of a stone.

Calculi are classified as (1) primary, *i. e.*, one formed in an apparently healthy urinary tract; (2) secondary calculus, a result of some change, inflammatory or otherwise, in the urinary organs. The former is formed entirely of substances found in the urine from which it originates, while the secondary stone requires a foreign colloid and is formed about a nucleus, often a primary calculus. Both of these are formed in aseptic urine and are composed of uric acid, calcium oxalates, xanthin, cystin, etc. A third type is the result of sepsis

and the effect of certain bacteria to split urea and liberate ammonia, thus producing an alkaline medium. These stones are usually phosphatic.

Stone is most prevalent in India, Egypt, China and Mesopotamia, and less common in Europe, the British Isles and North America. Stone is most common in districts where defective sanitation and hygiene are the rule. It is most common among the Hindus, Arabs and southern Chinese. The Negro race is singularly free. Heredity does not seem to have an influence except in cystin stone. A poor, monotonous diet is common in the stone areas.

Experimental evidence shows that food deficient in proteid and certain vitamins seems to influence stone formation.

Stone is a rare disease in districts where standards of living are high and the food is abundant and varied. Climate does not seem to be a factor, unless concentration of the urine from excessive sweating in hot districts is a deciding factor in those predisposed.

Chronic diseases, especially those requiring immobilization, such as fractures, spinal injuries, etc., may influence stone formation.

Faulty drainage due to position, congenital or acquired, changes in bladder or kidneys, has an influence, especially when infection is added.

Bladder stone is practically a disease of the male, while kidney stone is about equally frequent in both sexes.

The older statistics show lithiasis to be a disease of the extremes of life, but recent statistics show that stone in the highly civilized countries is rare in childhood, that renal lithiasis is a disease of middle life, and vesical calculus is more common in old age. In countries where the standards of living are not so high, nearly half the cases occur before adult life is reached. This change undoubtedly is due to a more rational diet for children and tends to confirm the theory that stone is a deficiency disease.

From the foregoing we can only conclude that the cause of urinary calculus is obscure and probably dependent upon many factors working in combination. One gets the impression that defective hygiene and a monotonous diet lacking in proteids and certain vitamins must have a considerable influence in those countries where stone disease is prevalent. In individuals who have a predisposition, *i. e.,* whose urines are not protected against precipitation of crystals, the effect of faulty drainage from congenital abnormalities or acquired obstruction favoring infection, or lower vitality from any cause, may become the cause of calculus formation. Conversely, a varied dietary, good hygiene and avoidance of concentrated urine are the best safeguards where there is no provocative influence.

OBSTETRIC CASE

(Anemia Developing During Pregnancy)

Dwight L. Dewees, M.D.

This case is presented as a case of anemia developing during pregnancy. We are able to trace its development very well. The patient is thirty years of age; delivered her third baby one month ago today at the Coleman Hospital. Her first pregnancy was normal except that she suffered from vomiting for the first six months. During her second pregnancy she suffered the same way, and at full term gave birth, after craniotomy, to a hydrocephalic baby.

The first time the Coleman Hospital came in contact with this patient was on October 31st, when she was brought in by her doctor complaining of vomiting. She said she had been unable to retain any food since she became pregnant. She was then approximately four and a half months pregnant. When she entered the hospital she had apparently lost no weight, the vomiting being the only physical sign.

The treatment was entirely for psychic benefit—hypodermoclysis, and stomach lavage. The second day she was at the hospital she developed hallucinations and illusions—imagined the Coleman Hospital had burned down and she was outside Indianapolis, in some other town. After the third day she vomited no more. She was gradually placed on a high carbohydrate diet, and was discharged from the hospital on November 12th, apparently cured.

The laboratory work on this patient, including blood serology, was absolutely negative throughout. Repeated examinations of urine specimens were negative. Red blood count, 4,800,000; hemoglobin, eighty percent.

The patient returned to the hospital on March 24th because she was on the verge of eclamptic convulsions. She was markedly edematous, hands and face and feet swollen. The urine showed 4-plus albumen; the blood pressure, which was normal before, at this time was 155/100. She was at term, and was placed on the regular eclamptic treatment, including intravenous glucose, high carbohydrate diet, colonic flushes, proper sedation, and, although she did not improve, she did not grow worse. After three days it was decided that medical induction should be done, a bag was inserted into the cervix, and in seven and one-half hours she gave birth to a normal infant, which survived.

At the time of the patient's admission to the hospital her red blood count was 2,200,000; hemoglobin, 40 percent; white blood count, 12,000; temperature, 101 degrees. Since delivery and during the time she was in the hospital she has run a low temperature, from 99 to 101 degrees. On April 14th her urine became negative. At that time her red blood count was 1,600,000; hemoglobin, 30 percent; white blood count, 9,000. She

was placed on liver extract, a high protein diet, red meat, liver, iron, etc. Since that time she has made some improvement. The blood picture shows the hemoglobin 50 percent; red count, 2,400,000; white, 13,000; 85 percent polymorphonuclear leukocytes.

As to what effect the high carbohydrate diet had in developing the anemia, we cannot say, but perhaps it did have something to do with it. At least she was on this high carbohydrate diet for a long period of time, and knowing the tendency of pregnant women to develop anemia, it probably helped. But with her reaction to the administration of protein she will apparently recover very nicely.

This is an anemia of severe type developing along with eclampsia dating from some time past four and one-half months, associated with neurotic vomiting and a highly psychic nature.

ORTHOPEDIC CASE

(Acquired Torticollis, Following an Attack of Tonsillitis)

WILLIAM V. WOODS, M.D.

Patient, a white male, aged six years, came into the out-patient clinic in March, 1931, holding the head to the right side and complaining of severe pain on motion toward the left side.

History: Full term, normal delivery; strangulated hernia at nineteen months, which was reduced and the hernia repaired. Measles at three years, with good recovery. So-called intestinal "flu" two years ago, with good recovery. Has always had frequent colds and some tonsillitis; at times during these attacks the breathing is asthmatic in type.

In December, 1930, patient had acute tonsillitis with enlarged cervical glands; was quite ill, but in bed only a few days. During this attack he began holding the head to the right and complaining of severe pain if the head was moved toward the left. There was no earache or discharge from the ear. Since that time he has had night cries. The parents state he often wakens screaming with pain in the left side of the neck and continues this for as long as a half-hour. He can sleep only on left side, with head propped with pillows.

Physical examination at this time was negative, except for head and neck. The head was tilted to the right with the chin pointing to the left; sternomastoid muscles were not spastic. All motions of the head were painless except toward the left, which appeared to be very painful. No pain could be demonstrated on pressure on any of the neck muscles.

The child was admitted to the Riley Hospital for further study. Ear, nose and throat examination showed the tonsils to be reddened and slightly hypertrophied; moderate cervical adenitis; glassy discharge on postnasopharyngeal wall; pus under anterior turbinates. Right mastoid negative. Ears negative. Transillumination negative. X-ray of the cervical spine was done, with the following findings: A. P. shows no abnormality of the spine; lateral film shows cervical spine from third to seventh, inclusive, and a large part of the first dorsal. First and second cervical could not be obtained on account of the torticollis. The first dorsal shows some lessened density overlying the body, making this suspicious for some destructive process. This condition shows in two films taken.

Laboratory work was as follows: Wassermann, negative; complement fixation test for tuberculosis, negative; Mantoux, negative; urine, negative. Red blood count, 4,400,000; white blood count, 8,500; hemoglobin, 85 percent.

A tonsillectomy and adenoidectomy was advised, and done. While under the anesthesia all the muscles were well relaxed. Both heads of the sternomastoid on the right well relaxed.

Torticollis may be of two types, congenital or acquired. In this case we are not interested in the congenital, but rather the acquired. Causes of the acquired type are:

1. Traumatic, such as a fall on the head, with wrenching and painful stiffness of the neck.
2. Inflamed cervical lymph nodes.
3. Acute inflammation of structures in the neck.
4. Reflex irritation. This type occurs especially in children because of their greater reflex excitability. The irritation may come from suppurative otitis media, abnormal teeth, tonsillitis, scarlet fever, measles, mumps, etc.
5. Ocular torticollis due to errors in vision.
6. Cicatricial contractures.
7. Paralytic.
8. Hysterical.

An early cervical Pott's may give symptoms of a torticollis, and so may a spinal arthritic condition.

Here we have a case of acquired torticollis, or one simulating that condition, which followed an acute attack of tonsillitis. There is only slight tenderness of the muscles of the right side of the neck; no other symptoms of a myositis; neither is there a true spasticity.

Only pain prevents motion to the left side, and that pain is not in the muscles of the right side, but more in the left side and in the spine. All other motions of the head are painless. X-ray findings are negative for any definite cervical pathology, but there is a suspicion of beginning destructive process in the first dorsal. Therefore, this is not a case of spastic torticollis, and must fall into one of three groups: reflex irritative torticollis, due to nose and throat infection; very early cervical Pott's disease, with as yet no definite x-ray findings; an early arthritic condition of the spine.

With the findings as they are, the tilting of the head seems to be more of a defense mechanism to prevent pain from bone pressure, and more

likely to fall in one of the last two groups mentioned.

With the continuation of the present position of the patient's head for a period of months, a true spastic torticollis would develop with spasticity of the right sternomastoid. We must, therefore, prevent this and at the same time rid the patient of all possible foci of infection, frequently checking up by x-rays possible destructive processes in the vertebræ.

The following treatment is to be used: Place patient on a Bradford frame with head and pelvic traction, using about five pounds on head; keep the patient in this for one to three weeks; follow by applying a Minerva cast, a cast involving trunk and head, with only face and arms free.

ORTHOPEDIC CASE

(Congenital Deformity of Lower Extremities; Bilateral Talipes Varus)

Otto F. Rogers, Jr., M.D.

Child, eight weeks old, was brought to the James Whitcomb Riley Hospital because of a deformity of both lower extremities. The history of the case is essentially negative, except that she was born with this deformity.

Physical examination shows a child apparently in the early weeks of life, well nourished, having no abnormal marks upon the body surface except for the two deformed extremities. These show a right leg that is shorter than the left, a flexion deformity of the right knee, the presence of only four toes, the larger toe being absent, and a marked talipes varus. The left leg shows a marked talipes varus, a very flail ankle, and a dimpling on the lateral side of the ankle.

Laboratory work is essentially negative, the red blood count, white blood count, hemoglobin and differential being within normal limits. The urine shows no abnormal constituents.

X-ray examination of both lower extremities shows the fibula to be absent in the right leg, and a shortening, hyperplasia and torsion of the tibia. Only two of the tarsal bones are shown, probably the os calcis and talus, as these two are the first to appear during fetal life. Only four metatarsal bones are shown, the second, third, fourth and fifth. No phalanges are shown. X-ray examination of the left leg shows a hypertrophy, hyperplasia and torsion of the fibula, a shortening and torsion of the tibia; three tarsal bones are present, probably the os calcis, cuboid, and cuneiform, and all five metatarsal bones.

Obviously this is a congenital defect, being a congenital absence of the fibula, first metatarsal and seven tarsal bones in the right foot and leg; also the absence of six tarsal bones of the left foot. There is also a bilateral talipes varus.

At the present time all that will be done is manipulation of the feet so as to correct the varus, changing the feet into the position of talipes calcaneous. Later it is possible that osteotomies will be performed upon the tibiæ and fibula to correct the torsion and make straight limbs. However, the prognosis in this case is obviously guarded, and later, if the above procedures fail, the most useful limb will be saved and the other amputated, substituting an artificial limb. The possibility of the child's walking is very good, provided she wants to walk.

SURGICAL CASE

(Partial Bowel Obstruction Complicated by Anemia)

Frank B. Ramsey, M.D.

The patient, twenty-eight years of age, entered the Long Hospital on March 2nd of this year, complaining of attacks of abdominal pain, loss of appetite, loss of strength and of weight. His previous health had been good up to 1923, when he was in an automobile accident in which he was thrown against the steering wheel and injured in the abdomen. This apparently was a trivial injury, but he had abdominal pain from this time for six or seven months. In 1924 he had an attack of severe abdominal pain, localized on the right side, and was operated for appendicitis. This was followed by a period of six months' relief from pain; then the pain recurred, and in September, 1925, he was operated for separation of adhesions. The pain, however, continued, and in November, 1925, he was again operated, adhesions separated, and at this time a loop of bowel which was partially strangulated was freed.

The family history is negative. At the time he entered the hospital he was in a rather severe state of shock, but his only complaint was abdominal pain and weakness. General physical examination showed a rather marked anemia and some emaciation. His abdomen was slightly distended, and on it could be seen three surgical scars, two in the right rectus muscle and one over McBurney's point. The abdominal wall was very thin and across it could be observed waves of visible peristalsis. He was placed on treatment of intravenous glucose and saline, given nothing by mouth, and he recovered from the attack at that time.

The red blood count on admission was 3,400,000; hemoglobin, 75 percent. As soon as he recovered from the first period of shock a barium meal was given him and plates taken. The stomach was partially filled with the barium, and the duodenum partially filled. Also loops of the small bowel were dilated. The next plate showed the duodenal cap, and the dilated loop of the bowel totally obstructed at this point. This plate showed a small amount of barium passing through the obstruction.

Several times during his stay in the hospital the patient has had attacks of deep shock, when

the blood pressure would fall to sixty or seventy millimeters of mercury and it takes a large intravenous of saline to restore him.

A diagnosis of partial bowel obstruction was made, chiefly from x-ray findings and from observation during the attacks of pain and visible persistalsis.

The blood picture is rather interesting. On numerous occasions an estimation of color index was made, the index showing consistently above one. At the present time his red blood count is 3,200,000; hemoglobin, 80 percent.

General laboratory work has all been normal; blood chemistry, normal; Wassermann, negative. The reticulocyte count was about 0.5 percent when he came in.

The patient is further interesting owing to the fact that he is the second case of partial bowel obstruction admitted to the Long Hospital within the last few years, which showed a blood picture approximating that of primary pernicious anemia. The other case had a much more typical picture, but this patient's red cells are of about the same size and shape. There is a theory that primary pernicious anemia relates to the function of the small intestine, and we find these two patients who have had their small intestines obstructed have developed syndromes approximating primary pernicious anemia. This may be due to the fact that some substance elaborated in the normal small intestine is in this type of case diverted from the blood stream.

This patient has been placed upon a therapeutic test of liver extract. On the 13th of this month the reticulocyte count was 0.5 percent; on the 15th we started the administration of liver extract, and the reticulocyte count has risen until at the present time it is two percent.

SPECIAL ARTICLES

INDIANA STATE BOARD OF HEALTH

Public Health and Rural Sanitation in the Drought Area of Indiana

A Deficiency Appropriation Act enacted by Congress February 6, 1931, provided an appropriation of $2,000,000 for the fiscal years 1931 and 1932 "for special study of, and demonstration work in, rural sanitation, including the purchase and distribution of medical supplies in the drought stricken areas and including personal services". This appropriation measure further provided that the state, county, or municipality affected should pay such proportion of the expenses of such demonstration work as might be required in regulations prescribed by the Public Health Service, giving due consideration to state and local economic conditions and human needs. Following the enactment of this Deficiency Appropriation Measure a conference was called by the Surgeon General U. S. P. H. S. at Memphis, Tennessee, which was attended by the state health commissioners of eighteen states, the medical director of the American Red Cross and other representatives of the states in the drought stricken area. At this conference a general plan of administration to be followed by the Public Health Service in cooperation with state and local health authorities, in carrying out the provisions of the act, was adopted as follows:

1. Supplementing existing county and local health departments by assuming obligations in health department budgets when local funds are lacking because of conditions resulting from the drought and by employing additional personnel when necessary as a temporary measure to meet emergency need.
2. By aiding in the support of county health units in counties having no such health organization by allocating funds when necessary and by providing temporary personnel to meet emergencies.
3. By aiding in the support of mobile health units as a part of the State Health Department to be supported by state funds to the greatest extent possible.
4. By contributing to the support of county public health nurses and sanitary inspectors in counties where such service is required and in which organized adequate health departments cannot be maintained.
5. By supplementing state boards of health with supervisory personnel for emergency work, such as assistant directors of rural health work, assistant directors of child hygiene, assistant sanitary engineers.
6. By aiding in supplying biologic products for use in preventing the spread of communicable diseases. Arrangements regarding biologic products will be made by the Public Health Service through state health departments.

Under the provisions of this federal emergency appropriation the State Board of Health has assisted in placing public health nurses in five counties as follows: Sullivan county, Harrison county, Crawford county, Spencer county and Perry county. A budget for a county nurse in Martin county has been approved, but the nurse has not been secured as yet. A public health nurse was also placed in the town of Edinburg in Johnson county for a period of two months because of an outbreak of scarlet fever. Biologicals for immunization against smallpox and diphtheria have been secured for the city of Madison and Jefferson county, for the city of Petersburg and for the immunization of a small group against smallpox in Seymour. The total authorization for Indiana for the remainder of the fiscal year ending June 30th has been approximately $3,500.

In all these budgets the county or municipality has cooperated through county or city appropriation, Red Cross funds, local tuberculosis society

funds and pledges from various organizations such as parent-teacher associations, civic clubs and American Legion. All projects instituted have been taken up and carried out through local health officials, local medical societies, county and city officials and local civic organizations.

In addition to financial assistance made available by federal appropriation, the State Board of Health has made a survey of all counties involved in the drought area of the state, has given assistance in maintaining and protecting public water supplies, has met with medical societies, Red Cross officials, school officials and public officials in an effort to carry out a constructive health promotion and disease prevention program. Fortunately no serious outbreak or epidemic has occurred in any part of the drought area and there has been no significant increase in the prevalence of communicable disease. Unfavorable conditions resulting from the drought continue, however, in many communities especially as related to the safety of water supplies, protection against typhoid, smallpox, scarlet fever and diphtheria and as related to nutrition of children. The State Board of Health has requested the allocation of funds from the federal appropriation to Indiana for the fiscal year beginning July 1, 1931, in sufficient amount to meet health needs that can be reasonably anticipated in that part of the state involved in the drought of the past two years. It is to be hoped that physicians, health officers, and citizens generally throughout the drought area of the state will give consideration to the possibilities involved in continued drought conditions and will cooperate with the State Board of Health, not only in meeting emergencies that may occur but as far as possible in preventing conditions that may result in such emergencies. The State Board of Health will be glad to extend to communities in the drought area all the facilities of the State Health Department as well as such financial aid as may be available under the provisions of the Federal Emergency Appropriation.

Death Rates for Indiana 1930 as Compared with 1921

(10-Year Period)

Rates per 100,000 Population

	1930	1921
Tuberculosis	65.9	92.7
Typhoid fever	3.3	12.3
Diphtheria	4.1	23.9
Scarlet fever	2.1	5.2
Measles	1.8	2.4
Whooping cough	3.0	11.8
Puerperal septicemia	2.9	6.2
Puerperal (all causes)	10.1	14.8
Pneumonia	86.9	80.2
Influenza	21.0	10.6
Cancer	104.6	91.7
Heart diseases	190.0	156.8
Bright's disease	80.4	92.2
Apoplexy	111.6	92.0
Diabetes	16.1	16.7

Infant Death Rate

(Under One Year of Age)

Per 1,000 Living Births

1930	1921
57.4	71.2

It will be noted that the year 1930 shows the lowest death rate ever recorded for the state for tuberculosis, typhoid fever, diphtheria, scarlet fever, puerperal septicemia, puerperal (all causes) and for infants under one year of age. The year shows the highest number of deaths for any year from automobile injuries, a total of 1,146 deaths, as compared with a total of 241 deaths for the year 1921. In this connection it is interesting to note in the Annual Report of the State Board of Health for the year 1907 that special mention was made of two deaths in that year resulting from automobile injuries. The year 1930 recorded the highest number of deaths from suicide, a total of 649, as compared with a total of 431 in the year 1921. It is interesting to note also the smallest number of deaths ever recorded from railway injuries, the total for 1930 being 161, as compared with 265 in 1921.

There were 19 deaths from smallpox in the state of Indiana in 1930. Diphtheria, typhoid fever and smallpox are absolutely preventable diseases. Vaccination against smallpox, immunization of children in the first year of life against diphtheria, typhoid vaccination with intelligent supervision and protection of water supplies, milk supplies and food supplies generally will eliminate these diseases.

The death rate for the state in 1930 from all causes was 12.1 per 1,000 population.

WINONA LAKE CHILD HEALTH PROGRAM

Child Health Week

and

Northern Indiana Conference on Child Health and Protection, July 6-11, 1931

The attention of the civilized world is being focused on the health and protection of children. The contributions of science revealed by the studies reported at the White House Conference on Child Health and Protection are being incorporated into a practical, workable program for the promotion of child welfare.

The success of such a program will depend not only on a public understanding of basic facts and an initiation of activities which will insure to every child his best opportunity but on the correlation of all programs for the benefit of the child.

In January, 1931, Indiana held the first continuation program following the White House Conference. Since then counties have held continuation conferences carrying the message of child

health and protection of more than one-third of the population of Indiana.

The original thought of President Hoover was to have regional conferences. With this plan in mind, the annual Child Health Week at Winona Lake conducted by the State Board of Health Child Hygiene Division has been divided.

Part I will include the usual child health week program of lectures, exhibits, motion pictures, and demonstrations. Exhibits have been promised by the American Dental Association, the National Association for the Prevention of Blindness, the National Association of Organizations for the Hard of Hearing. Special demonstrators will be present throughout the week. The Indiana Child Hygiene Division exhibit will include new material and posters and will be in charge of Miss Charlotte Davis, child hygiene exhibit director.

Pre-school children will be examined forenoons July 6th, 7th and 8th, but no examinations will be made during the last three days of the week.

On July 9th, 10th and 11th, a Northern Indiana Conference on Child Health and Protection is being planned. Invitations include all persons in all counties north of Indianapolis and as many south of Indianapolis as wish to come. There will also be out-of-state guests.

JULY 9

The program is arranged to present the educational viewpoint in the forenoon and the welfare program in the afternoon, while at an informal supper the guidance of the child will be considered.

JULY 10

Friday at the Auditorium, dental research, medical service and health service will be discussed. In the afternoon at the Presbyterian Church, a symposium on the handicapped child will include posture, vision, hearing and mental handicaps. A second symposium on health and medical service will be devoted to the five-year health and dental plans. A comparison of rural and urban problems will be given and a presentation of medical service in public health promotion.

JULY 11

The Saturday program is for youth outside the home and school. Instead of a speaker such groups as Boy Scouts, Girl Scouts, Camp Fire Girls, 4-H Clubs, Hi-Y Boys and Girl Reserves will present health and recreation projects at the Hillside Auditorium. Each group will come with a leader and at noon a northern Indiana basket picnic will be held. The afternoon will be devoted to sports.

Speakers will include:

Mary Matthews, Dean, School of Home Economics, Purdue University, Lafayette.

Deane Walker, County Superintendent, Plymouth.

Grover VanDuyn, Assistant State Superintendent of Public Instruction.

L. A. Pittinger, President, Ball State Teachers' College, Muncie.

J. A. Brown, Secretary, Board of State Charities, Indianapolis.

H. S. Hulbert, M. D., Chicago.

Milo Miller, M. D., The Clinic, South Bend.

Walter H. Baker, M.D., South Bend.

L. P. Harshman, M.D., Fort Wayne.

Wm. F. King, M.D., Secretary, State Board of Health, Indianapolis.

A. C. McDonald, M.D., Warsaw.

Ralph S. Chappell, M. D., Indianapolis.

A. L. Harter, D.D.S., Kokomo.

Fred R. Houck, D.D.S., Huntington.

Mary Emma Smith, R.N., National Society for Prevention of Blindness, New York.

Newspaper announcements will supply further details later.

DIPHTHERIA DEATHS FOR 1931 APRIL

Eleven deaths in April as opposed to seven for April of last year makes a total for the first four months of fifty. This is an increase of one over the corresponding period of 1930. We shall need to work hard to hold the rate where it was last year. Franklin and Grant counties entered the list for the first, each with two deaths. Both counties had been warned inasmuch as a new focus has developed recently in the counties of the southeast central portion. The proximity of Grant county to Madison county should have been sufficient warning there. Marion, Newton and Orange counties enter the list for the first time each with one death. Southern Indiana is doing decidedly better than northern during the past few months. We are very glad to see that Lake county had no deaths during the past two months. The epidemic here is evidently coming under control. Madison county with five deaths is the black spot of the state.

Below are the deaths by counties for the month and for the year:

County	Total for 1931	April	County	Total for 1931	April
Allen	2	1	LaGrange	1	0
Bartholomew	1	0	Lake	5	0
Brown	1	0	Laporte	1	0
Carroll	1	0	Lawrence	2	0
Clark	2	1	Madison	5	1
Dearborn	2	0	Marion	1	1
Delaware	2	1	Marshall	1	0
Fayette	2	0	Martin	1	0
Franklin	2	2	Montgomery	1	0
Gibson	1	0	Newton	1	1
Grant	2	2	Orange	1	1
Green	1	0	Ripley	3	0
Hamilton	1	0	Starke	1	0
Henry	1	0	Vanderburgh	1	0
Howard	2	0	Vigo	1	0
Huntington	1	0		50	11

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EDITORIALS

PROTEIN AND VACCINE THERAPY

As we have stated in THE JOURNAL on numerous occasions we believe that many physicians have unjustly and unwisely accorded too much value to protein and vaccine therapy. We believe that we are safe in assuming that many of the busy physicians who are so favorable to this form of treatment for all manner of conditions have not taken into consideration the natural history of the diseases treated, nor have the clinical conclusions been based upon such an analysis of all the findings as is necessary in order to arrive at facts. On the other hand there are physicians who are convinced that what little benefit is secured from protein and vaccine therapy is far outweighed by the possible dangers.

For a period of about fifteen years, or from 1906, when Wright introduced vaccine therapy, until 1921 or 1922, vaccine therapy had a tremendous rise and almost equally radical fall. In 1923 such careful investigators and clinicians as Hektoen and Iron published an article on vaccine therapy in the *Journal of the A. M. A.*, and they reported the results of a questionnaire sent to 1,500 prominent and trustworthy clinicians, finally coming to the conclusion that vaccines do not give the results expected and often do produce harmful results. In fact rather conclusive evidence was brought forth to show that in a number of cases death was considered to have been caused by the use of vaccine subcutaneously injected. About the time when vaccine therapy in general had passed the peak of its popularity, attention was called to the reactions that occur in the body following the introduction of foreign proteins, whether of bacterial or other origin. From that time on protein shock reactions became popular, and various clinicians recommended everything from animal serum and vaccines to milk or its products. There is a long list of different diseases and conditions that have come in for non-specific protein therapy, with clinicians varying in their enthusiasm in recommending the treatment.

The whole subject again has been the basis of a very carefully prepared article by Irons (*Journal A. M. A.*, April 18, 1931), who tersely remarks that haste as well as progress demands that clinical observations be controlled as completely as our laboratory experiments, and that observers should not be too hasty in publishing results that under careful analysis may prove to be misleading. As pointed out by Irons, the question to be answered is not whether such profound changes in the body produced by the intravenous injection of a foreign protein occur, but whether they are of advantage to the patient, and if so, whether the advantages gained offsets any possible disadvantage. It also must be determined whether such improvement as is noted following protein therapy actually is due to the remedy, or whether in the disease in question similar improvement may occur spontaneously. That many trustworthy observers have had beneficial results from protein therapy is unquestioned, and yet some of those observers in the light of recent events and a better knowledge of the course of some of the conditions treated are beginning to lose some of their early enthusiasm, as evidenced by their published and private contributions on the subject.

Irons says that preliminary to drawing conclusions as to the effectiveness of a remedy it is obviously necessary to know what is likely to be the course of the disease in untreated cases. If an hypothetical disease is considered in which the outcome is known to be uniformly fatal, and with a new method of treatment even one or two recoveries or improved cases can be obtained, it at once reasonably may be concluded that the remedy has value. If a disease is treated whose case fatality is known from years of clinical observation to be fifty percent, and in a controlled series of sufficient number a case fatality of twenty-five percent should be obtained by the treatment, again it may be concluded that the remedy has clinical value. On the other hand when the remedy produces no better results in a series of cases in which it is used than are obtained in an equal number of cases in which the remedy is not used, then it is reasonable to conclude that the remedy in itself has no particular value.

After discussing the phases of the subject which require consideration of all of the various factors entering into the case, such as the age of the patient, time of treatment, epidemic severity, decrease of disability, complete or partial relief of pain and tenderness and other manifestations, the author concludes by saying that the effects as yet lack complete explanation as well as control by the laboratory. In several groups of diseases the evidence of clinical control sufficient to warrant conclusions as to the effectiveness of the treatment is lacking. It also must be noted that in several of the diseases in which clinical effects from injections of foreign protein are supported by good evidence, the treatment is designed for use in combination with other recognized methods other than to displace them.

In his summary Irons says, "Striking results, including numerous instances of clinical improvement, have been noted following the use of protein

shock therapy. For the most part these have been seen in acute conditions rather than those of long duration. As a routine and sole method of treatment, the case for protein therapy has not been proved. It is necessary here to distinguish from this large group, methods of specific immunization and desensitization employed to relieve the symptoms of sensitiveness to specific known proteins such as those of some pollens and foods. Whenever it is proposed to use protein shock therapy in a special case, due consideration should be given to a possible serious and unexpected outcome. The present wave of popularity for injection of foreign protein for diseases of all descriptions is likely soon to pass, as have other modes and styles."

RABIES PREVENTION

The continuation of the rabies epidemic in Indiana indicates to what extent the maudlin sentimentality about dogs shackles society. We have in our time had some very dear pets from the dog family, and as a matter of fact we had the very unhappy task of having to shoot one of them because he was "mad". For this reason we sympathize with those who love their dogs, but somehow we cannot get up much sympathy for the dirty, flea-bitten, half-starved mongrel that has no home. He is the one who carries most of the rabies, and he should be apprehended and put out of the way as speedily as possible—giving time of course for persons who have lost their dogs to identify their pets.

Recently there has been another human death from this most dread disease, and as a matter of fact the entire city of Indianapolis is supposed to be under quarantine insofar as dogs are concerned. For the sake of the children who are the ones most commonly bitten; for the sake of other people who are occasionally bitten; for the sake of the farmers who are losing a great deal of live stock from this disease, even for the sake of the dear dogs themselves this monkey business concerning rabies prevention should be brought to a speedy end. Kill all ownerless dogs; keep owned dogs at home; investigate carefully every reported case of rabies and the trick is soon done.

NEW STATE HEALTH OFFICERS

The people of Indiana are to be congratulated, and particularly are the nominating board consisting of the Governor, the Secretary of State, and the State Auditor to be commended for the appointment to the State Board of Health of Dr. A. C. Macdonald, of Warasw, and Dr. John H. Hare, of Evansville, to fill the places of the two men whose time was up during the month of May. These two men are democrats while the remaining two are republicans. None of the four are men who care anything about politics, and so we can rest assured that the sinister effects so harassing to the Board and the Secretary during the Jackson administration will be conspicuous by their absence. Matters pertaining to public health and the welfare of the community are far too serious to be entrusted to peanut politicians, and they are complicated enough as it is. We suggest a vote of thanks to the nominating board.

We are also very glad to report that one of the last acts of the old board was to reappoint Doctor King, who is now entering on his third four-year term. Previous to the time he became secretary of the board, he was the righthand man of Doctor Hurty for twelve or fifteen years. While we, in common with others, have criticized Doctor King at different times, all must admit that he has run the department without any sort of scandal or graft; that he knows the health problems and the health law of the state better than anyone else; and that there is hardly anyone else in the state who would want the job that could be considered anywhere near so well qualified. Here is to Doctor King and the new board; we wish them well.

MEDICAL PRACTICE IN TOWNS AND VILLAGES

Within the last year or so several blind ads have appeared in THE JOURNAL asking physicians to locate in certain small villages and towns in Indiana. Such opportunities ought to attract the attention of the younger men in the profession, but when we talked to one of the younger physicians desiring a location he very promptly said, "I would rather starve in the city than have a comfortable income from practice in a village or small town." Well, some of the younger men practically are starving in the city, and it strikes us that in this day and age, with so many conveniences that may be had in the small town and village, and easy access to metropolitan centers, the young physician is a blooming idiot if he does not at least get his start in a place where he can be assured of a comfortable living, and usually an opportunity for saving far more than he ever can save in the city. This idea of wanting to be where the bright lights dazzle you is a bad attitude to assume and has prevented many from attaining that success in life that could have been secured had they exhibited a little willingness to get away from the over-crowded cities. In passing it may be well to remind some of the younger men that Rochester, Minnesota, a few years ago was a village located in a not very populous farming district a long ways from a large city, and it still is not large though now a small city owing its growth very largely to the work and influence of two physicians. A physician does not have to locate in a city in order to make a success for himself, professionally as well as financially. This fact has been proven times without number, and it would be well for some of the young medical graduates to remember it.

SELF-PRESCRIBING

We regret to note that some of our most representative and trustworthy manufacturers of chemical and biological products seemingly are putting forth every effort to create a demand for their products by the public, after first getting recognition from members of the medical profession. In other words many of these firms are favoring the cause of self-prescribing on the part of the laity, and take advantage of the well-known tendency of physicians either to tell patients what is being prescribed for them or to give prescriptions for products that when purchased of the druggist give name, therapeutic indications and dosage for the benefit of the purchaser. The physician who is so glib about telling patients concerning the medicines that are being prescribed and used therefor is not only hurting himself but hurting his patient as well, for he is promoting the pernicious practice of self-prescribing. Practically all of the well-known proprietaries owe their commercial success to introduction to the laity by the members of the medical profession, and in passing it may be said that most of the morphine habitues owe their downfall to a craving for drugs created by physicians who all too willingly tell patients when a narcotic is prescribed. The universal habit of self-drugging with aspirin in its various combinations, ephedrine solutions, and laxatives of every description is due to physicians who encourage self-prescribing. There really is no excuse for it.

THE SUPERTRAINED NURSE

We have been asked why THE JOURNAL is opposed to advanced education and training for nurses. We thought that question had been answered in comments made heretofore, but we are very glad to say a few words more on the subject. In the first place, while there is need of the expertly trained nurse, yet she actually is required in less than five percent of the cases that require nursing. The balance of the cases will do very well with a less highly specialized type of service. Second, the expert nurse demands and should have compensation in keeping with the time and expenditure put upon her education and training, and the quality of services that she is rendering. The average sick person is unable to pay for this service, and especially when, as a result of the short hours which these highly specialized nurses will work, it becomes necessary to have two nurses. Third, for a very large percentage of the number of cases that actually require the services of a nurse it is quite sufficient to have a nurse who knows how to give the general care needed, who can follow orders, and who can observe and report symptoms accurately. Such nurses may be created without requiring a high school diploma or records of college attendance, or three or four years of supertechnical instruction such as is given in some nursing schools that supposedly are turning out merely general nurses. Many of these supertrained nurses have neither had nor have they sought the requisite amount of practical bedside training. Fourth, there is a crying need for thousands of old-fashioned nurses who know enough about caring for the sick to be exceedingly useful and abundantly efficient and helpful to both physician and the sick without possessing so much of the supertraining that now is demanded of every female who is licensed to nurse or holds herself out as being a trained nurse, and who is willing and glad to work for compensation that is in keeping with the ability of seventy-five percent of the sick people to pay. We have no objections of any kind whatsoever to any high standards established as a requisite and a requirement for the highly trained nurse who expects to do technical or specialized work, but we do object to compelling *all* those who attempt nursing to comply with such standards. Our plea is for a very satisfactory and useful nurse, duly accredited, who can be made very satisfactory to the majority of sick persons, without this supertraining and without costing the patient so much as the supertrained nurse expects and should have as compensation. We also make a plea for more nurses who are willing to take cases as they come, just as the ordinary physician does, instead of politely but emphatically refusing to nurse only certain kinds of cases, to nurse only in a hospital, or perhaps refusing to nurse at all unless the cases and conditions relating thereto meet with exacting requirements. Lastly we are in favor of hourly nursing in the home and group nursing in the hospital by graduate nurses when needed, thus making it possible for more people in moderate financial circumstances to afford the graduate nurse.

GENEROSITY RUNS RIOT

Recently we have been reading some circulars and pamphlets sent out by the American Legion concerning the prodigality of the United States Government in furnishing a lot of compensation and gratuitous services that are costing the government a fabulous sum of money every day and the expense of which will increase as time goes on. The soldiers' bonus may have been a godsend to a comparatively limited number of ex-soldiers, but if all reports are true most of those who obtained the bonus spent it very promptly and extravagantly for luxuries. For instance the public press published one item to the effect that out of seven hundred ex-soldiers in one community who received a bonus, over five hundred of the number used the money as first payments upon more or less expensive automobiles. What interests medical men is the uncalled-for generosity in providing sickness benefits, including hospital care, for not only the ex-soldiers but members of their families. The U. S. Veterans' Bureau already has dispersed

more than five billion dollars for the care of the disabled and their dependents, and in 1930 Congress made available for this purpose more than five hundred million dollars to be expended by the Veterans' Bureau during the current fiscal year. Furthermore, the sum of $121,950,000 has been authorized by Congress for the acquisition, construction and alteration of the U. S. Veterans' Hospitals. As a result of this authorization the Veterans' Bureau it is said will have more than sixty-three modern, fireproof hospitals with a bed capacity exceeding 26,500, and Congress is being urged to provide additional beds.

The American Legion is sending out circulars from which we quote the following: "Do you know that if you are in need of hospitalization the U. S. Veterans' Bureau will grant you free hospitalization, which includes rooms, board, doctor's care, surgical care, nurses' care, medicine, physical examination, x-ray pictures, electrical treatment—in fact, free treatment of every known disease? Do you know that you also are entitled to free railroad or auto transportation to a government hospital and free return trip home? Do you know that in case an ambulance is needed to transport you to the hospital or to a railroad station in making a trip to a government hospital, this also is furnished, as well as an attendant to accompany you if your condition is such as to warrant it?" Other perquisites pertaining to death and funeral expenses are mentioned, and then the statement is made, "All of the above is offered to you free, *regardless of whether or not your disability is incident to your World War service.*" (italics ours).

We believe that the World War veterans deserve generous consideration, and especially those who have disabilities that can be traced to their service, but we believe, as is believed by thousands of the veterans themselves, that liberality and generosity can be stretched to the breaking point. In fact there has been a growing tendency toward the adoption of paternalism in many respects, with the result of increasing dependency and destroying initiative. The question arises as to where it all will end if we keep on dipping into the public treasury for the benefit of all sorts of enterprises, good, bad and indifferent? The government already has a deficit, and that deficit is going to grow with the passing years unless an already over-burdened tax-paying public is called upon to bear increased burdens of taxation. Already the minority is paying for the support of the majority, and this fact will be all the more impressive within a few years. We seem to be encouraging the development of a very large class of loafers and shirkers who seemingly appear to think that the world owes them a living and without effort on their part to earn it, and in due course of time that class is going to be a disturbing element in our body politic that will be hard to reckon with. The disabled World War veterans deserve and should have generous treatment, but there are thousands of World War veterans who are getting far more than they deserve as compared to other people equally as deserving. A tremendous burden is being borne, and it is getting heavier every day. It is not confined to soldiers' bonus and pension and care of disabled veterans, which in reality is a minor part of the burden, but it takes in all kinds of benevolences and perquisites established through various specious pleas as to necessity or advisability, and all requiring enormous drains upon the public treasury. We long since have forgotten anything about prudence, thrift and economy, but seem to be "hell-bent for election" in our efforts to show how inconsistent and unreasonable can be our extravagances. Where will it end? There certainly must come a day of reckoning.

We are beginning to agree with Henry Ford that the way to cure our economic ills is to help people to work and not to shirk. It is nothing short of a crime to donate so extravagantly and extensively as we do now, a practice that breeds dependency and pauperism and adds to the general spirit of unrest and dissatisfaction.

THE COFFEY-HUMBER CANCER CURE

A few weeks ago Dr. Charles H. Mayo made a western trip, including California, during which he spoke before a number of lay and medical organizations, and visited several large hospitals and scientific institutions. Our readers will be interested in what he has to say concerning the Coffey-Humber cancer cure, and we therefore are referring to his remarks as published in the *Proceedings of the Staff Meetings of the Mayo Clinic.*

Doctor Mayo says that Coffey is not trained in research work and that it is reported this is not the first time that Coffey has believed he had a cure for cancer. The Southern Pacific Railway has a wonderful hospital, and Coffey is chief surgeon for the hospital. Recently the hospital has been the beneficiary of a $650,000 wing for Coffey's cancer work. There are a large number of cancer cases and many medical visitors for this department. The Coffey treatment apparently requires many injections over many months' time.

When asked for an opinion concerning the Coffey treatment, Doctor Mayo explained that it would take five years of time and the treatment of many cases of cancer to enable the results of the Coffey treatment to be compared with the results of other methods of treating cancer, and that if the question could be answered now there would be no need to continue research. That would seem to set aside any assumption that scientific men are going to accept anything but established proof as to the value of the Coffey or any other treatment. Very naturally scientific men have a healthy skepticism concerning the value of the Coffey treatment, for up to the present time the results, when critically analyzed, are no

better than results secured from some other forms of treatment which include the use of surgery, x-ray and radium.

Doctor Mayo concludes by saying that cancer research should be continued, but that it is very essential that it be done under University control.

ONE DOLLAR LIFE INSURANCE EXAMINATIONS

We have discussed life insurance examination fees on different occasions and commented on the practice of some companies in requiring exacting service of physicians in connection with life insurance examinations without exhibiting a willingness to pay adequately for the service. Recently we have received a letter which reads as follows:

"You no doubt are aware that the Modern Woodmen have raised their insurance rates to conform with the rates of old line companies. They still are expecting physicians to make thorough examinations of applicants, to write down the answers to all their questions, and for a measly one dollar. It appears to me that all physicians should refuse to make an examination at that price."

It is a well-known fact that the companies or organizations that require physical examination and pay a niggardly fee for the service usually are the ones that are most exacting as to details and the most apt to be dissatisfied with the service. Even to fill in the blanks of such companies or organizations, requiring answers to a large number of questions, many of which are idiotic insofar as throwing trustworthy light on the subject is concerned, is worth all of the fee paid if a physician counts his time as worth anything. Aside from this it is an insult to offer a reputable physician one dollar to make a complete physical examination, and any physician who will even attempt to make such an examination for such a price must be hard up for work.

Of course our medical societies cannot control the actions of its members in the acceptance of fees for services rendered, but we think that our state medical association should pass a resolution recommending that adequate fees be charged for complete physical examination for insurance companies and other organizations requiring such examinations, and point out that it is considered inimical to the best interests of medical men individually and collectively to do such work at fees that are inconsistent if trustworthy service is to be rendered. If the Modern Woodmen expect to secure physical examinations at one dollar each, they must of necessity realize that examinations secured at that fee are superficial and worthless, for no capable and honest physician is going to make any examinations that are not trustworthy, and it is not likely that any such physicians will make examinations for the fee mentioned.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

FOR the benefit of county medical society secretaries and others who furnish news notes and personals for appearance in the current number of THE JOURNAL, we wish to say that all copy should be in our hands not later than the first of the month, and preferably by the twenty-fifth of the preceding month.

WE are pleased to note that so many Indiana physicians are identified with the American College of Physicians. We are strong for the organization of enterprises that refuse membership or affiliation except upon proven merit. Indiana has a goodly number of physicians whose qualifications are attested by special organizations and the number is growing.

RECENTLY THE JOURNAL called attention to the fact that an Indiana hospital had sent circular letters to members of the medical profession in Indiana, soliciting patronage for the hospital. The Executive Committee of the Indiana State Medical Association immediately took up the matter, with the result that a representative of the hospital attended a meeting of the Committee and assured the members of the Committee that such an incident would not occur again, and expressed regret that anything objectionable to the medical profession had been said in the letter. Due credit and praise should be given the Executive Committee for its interest in the propriety of hospital conduct and for its prompt action in condemning unethical practices.

WE note that most of the advice and suggestions offered concerning how the practice of medicine shall be conducted in its relation to social and economic conditions comes from lay persons, with an occasional opinion from some medical graduate who never really practiced medicine. Why is it that we cannot have some opinions ourselves and formulate plans of action which will get us somewhere in adapting ourselves to changing economic and social conditions. As a matter of fact we are too apathetic as well as too busy with our individual affairs to pay any attention to problems that are pressing for solution, and the solution of which is of vital interest to our

own interests. Are we going to continue to sleep, only to be awakened when catastrophe jars us out of our slumbers?

CORRESPONDENCE schools for nurses are discredited everywhere by those who know that thorough training in that profession cannot be and never will be possible through correspondence. The United States Public Health Service has called correspondence schools for nurses a fraud upon the public, and has pointed out that not even the rudiments of nursing can be taught by mail. We are pleased to know that the Bureau of Publicity of the Indiana State Medical Association has discussed this matter very frankly in a release for the lay press which went out under date of April 27, 1931. Physicians should discourage young women from giving serious attention to the advertising of correspondence schools of nursing.

THE editor has recently received the following letter:

Editor THE JOURNAL:

Last week I was called to see a woman who asked me if I knew her, and upon stating that she looked familiar she handed a bottle to me and asked if I recognized it. The bottle was dated March 9, 1920. I had written the prescription for her when she was visiting her son at that time, eleven years ago, and that day she went back to her home in Albuquerque, New Mexico. She has been using the same prescription ever since. She stated that all her friends and neighbors out there had been using the prescription and also said that the druggist told her he had made lots of money on that prescription which apparently had been filled and refilled for a large number of people in the community.

I got paid for the prescription once—I wonder how many times the druggist was paid for it?

....., M.D.

Extended comment is unnecessary. The experience of our correspondent is quite sufficient to encourage abandonment of prescription writing and begin drug dispensing.

OPHTHALMOLOGISTS and otolaryngologists will be interested in a series of articles on the use of local anesthetics which are appearing in the *Journal of the A. M. A.* In the article under date of April 18, 1931, the point is made that is worth emphasizing when the author says, "In the nose it is necessary to use cocaine in septal resections, turbinectomies and operative work on accessory sinuses. Attention has been called to the fact (Roth) that the combination of cocaine and epinephrine act synergistically and gives greater rise in the intracranial, intravenous pressure than when these two drugs are used separately. For this reason it is better in intra-nasal work to apply epinephrine, wait for five or six minutes until this maximum effect has disappeared and then use the cocaine. As general sedatives the barbital derivatives or bromides may be used with considerable effect, and the former when given before the operation are said to lessen the toxic effects of cocaine anesthesia.

A PHYSICIAN friend of ours expressed a medical opinion which the profession considers as rank heresy, but he maintains that eventually the truth of his position will be proved and he says that right now he is like the church organist who at the conclusion of a Sunday sermon began playing a tune which most people recognize as belonging to words so often heard in pre-prohibition days, "How Dry I am," etc. The minister and church members were scandalized, and probably most of them felt that they wanted to burn the organist at the stake. However, the organist finally proved that he merely was playing an old English church hymn to which modern day liquor guzzlers had seen fit to attach a different name. Sometimes things that we consider rank heresy are not so heretical after all if submitted to due analysis, and we must admit that medical conceptions of etiology and treatment of disease are changing with the progress of time.

IT is surprising how many people use the present financial depression as an excuse for non-payment of bills for professional services, and no doubt conditions warrant leniency on the part of physicians in expecting prompt payment for their services, but the provoking feature in connection with the situation is the complaint on the part of some people that the reason they are not paying their accounts to physicians is because of unsatisfactory services. Worse than all is the aid and comfort given such people by rival physicians who seem to take a special delight in discounting either the quality or value of services rendered by confreres. One of the younger physicians, struggling for existence, has complained bitterly about this matter and very justly comments upon the apparent failure on the part of some physicians to exhibit any great amount of professional ethics or fraternal attitude toward confreres. What we should do is encourage more professional spirit among medical men, and in particular charity and helpfulness to the younger men in the profession. In the long run no one ever profits by efforts to tear down another.

DEATH from explosion of a mixture of anesthetic gases is relatively uncommon and yet instances of that character should be abolished altogether. The cases at Evansville, and more recently at Los Angeles, should not be duplicated. The recommendations of the Committee on Anesthesia Accidents are that the anesthesia apparatus should be constructed wholly of metal or other material that is a good conductor of electricity so that it will be incapable of developing or retaining highly localized electrical charges. In the operating room wherever inflammable anesthetics are used there should be strict rules against any open flame or light. Particularly important is it that all electrical apparatus should be so inclosed or so protected that anesthetic gases and vapors cannot reach the electrically charged light nor will they

be in such proximity to the patient as to receive static sparks. The Los Angeles accident is supposed to have been due to the use of diathermy, and the management of the hospital in which the accident occurred has recommended that physicians should be warned not to use diathermy in the presence of explosive gases.

THE American Academy of Ophthalmology and Otolaryngology is the largest special society in the world, having several thousand members on its membership rolls. This year's annual session of the organization will be held at French Lick Springs, Indiana, September 13th to 19th, inclusive, under the presidency of Dr. John F. Barnhill, of Indianapolis. The program will consist of not only scientific papers by leaders in the profession but an instructional course given by some seventy-five or one hundred of the most prominent teachers and clinicians. These instructional courses are in reality postgraduate courses, and intensely popular as evidenced by the advance complete sell-out of tickets for admission. In addition to the scientific treat there always are many social features of interest to the specialists and their wives. At French Lick it is expected that the visitors will receive a genuine "Hoosier" welcome, and the Indiana members of the Academy should put forth every effort to see that the visitors, coming from practically every state in the Union, will go away with a fine impression of the hospitality of the Hoosier eye, ear, nose and throat specialists.

A BOSTON surgeon who seemingly has put forth an effort to advertise extensively his fellowship in the American College of Surgeons and the prominent part he has taken in the various medical activities sends out an announcement to the effect that he is about to publish a book giving his surgical experiences and reasons for the opinions that he holds, advance five-dollar subscriptions for the book being duly appreciated. The announcement also carries the information that the office now is located in one of the Boston hotels, and that by arrangement with said hotel, in which the surgeon admits that he is interested, people coming from a distance for consultation, or convalescent surgical patients and their families, may obtain accommodations at the hotel. Physicians, surgeons and friends are urged to patronize the hotel, and to avail themselves of the services of the Boston surgeon in such manner as may be necessary in arranging to attend clinics, getting about the city, etc. How immodest! How refreshing to find one Boston surgeon who does not hide his light under a basket! The American College of Surgeons has put its tag upon a number of such fellows who to say the least cast propriety to the winds.

WE frequently have wondered if reputable physicians accept and use samples of quack or near-quack remedies sent by manufacturers seeking commercial gain through the sale of products not approved by the Council of Pharmacy and Chemistry of the A. M. A. The question has been answered by patients who have shown us some samples of nostrums of secret composition that were prescribed by the family physician. Really, isn't it a wonder that the public has any confidence in us when we resort to such palpable deception? Any rational minded physician knows that when he prescribes a product of secret composition and one not approved by a trustworthy body like the Council on Pharmacy and Chemistry of the A. M. A., he is practicing deception and aiding fraud. As much may be said for the editor and manager of a medical journal who accepts and prints in his journal the advertising of all sorts of medical frauds and near-frauds. Equally reprehensible is the practice of some very highly respected physicians in giving aid and support to such journals. There are many of our profession who are not consistent, and the profession as a profession suffers in consequence. To merit a high degree of respect we ought to be free of suspicion of deception or misrepresentation.

THE function of boards of health is to promote disease prevention. Formerly the principal duties of a health officer was to look after sanitation and in a rather superficial manner establish quarantine in contagious diseases, but that time has passed and now we not only expect but demand that health officers shall take a vital interest in everything that aids in the promotion of health. The time has arrived, however, when we should adopt means of providing intensive training for public health officers, and particularly executives. There are a few universities and independent medical schools that have turned their attention to this undertaking, but for the most part we lack activity in this direction. In Indiana our university can well afford to consider seriously the advisability of offering a course in public health work that would fit men for a field of activity that is growing in importance. No longer should public health officers be appointed at random, and no longer should we depend upon a school of practical experience to furnish our public health officials. The conventions and round-table discussions should continue in order to keep our public health officers abreast of the latest developments in public health work, but our present plea is for the preparation of these men before they are appointed to office.

TUBERCULOSIS death rates for the year 1930 were very encouraging. Many states—indeed most of them—reported new low rates. This is pleasant news and indicates that the Great White Plague can be whipped to a standstill by medical science and the splendid aid that the layman has given. In 1910 tuberculosis was the commonest cause of death; in 1915 it was second; in 1920 it had dropped to third place; in 1925 it was fourth; in 1927 it was fifth; in 1929 it was sixth and

in 1930 it was seventh. That is not a bad record at all. At the present time it is exceeded as a cause of death by organic heart disease, pneumonia, cancer, nephritis, apoplexy, and accidents. But look out for the next few years. It is rather likely that the continued economic depression of 1930-31 will give the villain another chance to raise his ugly head. It has been said that there are four causes of tuberculosis, as follows: "Poverty, *poverty, POVERTY*, and the germ of tuberculosis". If this be true, and we are quite sure that there is a great deal of truth in the statement, the hard times of the past several months will assert themselves in an increase. The increase has not begun to show itself yet, and could hardly be expected to do so for another year or two, but we are going to need to fight pretty hard to prevent it. Now is the time to be looking out for tuberculosis in that hard pressed family that has been having a tough time of making ends meet.

PHYSICIANS are supposed to be trusted implicitly to keep secret the history, etiology, diagnosis and treatment of the diseases of patients. Occasionally some physician is garrulous and tells more than he should, even though he does it innocently enough and without intent to profit himself or embarrass the patient. More often the wife of the physician knows too much about the ailments of her husband's patients, and altogether too often talks too much, with the ultimate result of harming her husband's practice and standing in the community. We had supposed that when it came to the consultation of one doctor with another for personal ailments there certainly would be some secrecy observed, but every once in a while a physician who desires to find out something about his own physical condition consults someone at a distance, not because he doesn't trust his confreres at home but because, as one physician said to us, "if I call on any of my medical friends at home that fact will be broadcasted and inside of three days the whole town will not only know all about it but probably list me among those expected to die very shortly." We are under the impression that for the most part all physicians are careful in the avoidance of conveying to any person not entitled to it information concerning the patients that have consulted them, but there are exceptions to this rule which makes it appropriate to instill in the minds of the younger physicians the necessity of holding professional confidences inviolate.

WE learn that a young woman consulting a physician for the first time was told that she was suffering from a malignancy and that the case was hopeless, whereupon she proceeded to take her life. It seems to us that physicians should remember that while frankness and honesty is commendable in discussing a patient's ailments, still a spirit of optimism and encouragement should prevail, for it is a well-known fact that some apparently hopeless cases do survive for long periods of time, and some of them make unexpected and miraculous recoveries. What seriously or fatally ill patients need is a spirit of helpfulness manifested by the attending physician. It is gratuitous cruelty for any physician to prognosticate bluntly an early doom for the patient without any hope of relief. It is not necessary to deceive the patient or be inexcusably dishonest in giving an opinion, but when an opinion is required it may be expressed tactfully and at the same time coupled with a word of encouragement that goes a long way toward easing the mind of the patient. Furthermore, it is a feeling of helplessness that drives patients to quacks and impostors, and many a competent physician has been responsible for helping the quacks by exercising poor judgment in advising patients as to the nature of their ailments and bluntly informing them of the impossibility of securing relief. Occasionally a "hopeless case" gets well and some quack gets the credit for it.

DURING this period of financial depression nearly all industrial concerns were forced to cut down on the number of their employees as well as the total working hours of any and all employees, and now find themselves in considerable difficulty with compensation cases due to the tendency on the part of some employees to malinger in order to obtain compensation that will offset the loss of wages due to the depression and lack of employment. As one employer said, "If we did not understand the psychology of the situation we would be forced to believe that you doctors are rendering very poor service in your attempt to give adequate and satisfactory care to our injured employees, for we never have experienced such long delays in getting our employees back to work after they have been injured, nor have we experienced so much difficulty in securing a settlement of claims for compensation for some ordinary injuries that seemingly have drifted into very serious disabilities."

All of which reminds us that industrial work requires not only the best of care from a medical and surgical standpoint, but also requires a great deal of diplomacy and judgment in protecting the employer from malingering and downright fraud. Employers of labor should appreciate the services that are rendered by the conscientious and well-trained physician who is attempting to give the very best type of professional service and to exhibit unquestioned fairness to employee as well as employer.

A YOUNG physician who had been noting the increase in his practice has been sufficiently analytical to investigate the reason for some of his patients leaving recognized capable physicians and coming to him, and a little quiet investigation has shown that in many instances the change has been made because of indebtedness to physicians previously consulted. He has assumed a "hard-

boiled" attitude and tactfully impresses upon his patrons the idea that he expects to be paid promptly for his services, and to those known to be indebted to one or more confreres he also tactfully though nevertheless emphatically expresses the opinion that confreres who have rendered services for which they have not been paid should at least be given first choice when services are needed again, or if credit is expected from another physician it should be received only after bills for professional services previously rendered have been liquidated. The fact of the matter is that it leaves a bad taste in the mouth when you discover that a new patient owes every other doctor in town, and there should be some method whereby the practice of shopping as the basis for the avoidance of the payment of a just obligation may be prevented. Physicians are charitable enough, in fact they are too charitable, and they are imposed upon shamefully as a result of their leniency. There is absolutely nothing wrong in seeking protection, and any physician is perfectly justified in an endeavor to prevent such rank impositions as so frequently are practiced upon him.

AN article in a current issue of *The Nation*, a so-called liberal weekly, entitled "Is Advertising Honest?", is largely an attack on organized medicine and especially the American Medical Association for sponsoring false and dishonest advertising of matter relating to health. The author of this article charges that the *Journal of the A. M. A.* and other reputable medical journals open their advertising columns to unscientific products. He charges organized medicine, presumably the A. M. A., with interfering with the efforts of the U. S. Food and Drug Administration in keeping advertising honest and ethical.

This article is interesting principally because of the light it throws on the danger of depending upon the professional writer for facts and safe conclusions relative to the subjects they discuss. The author of this particular article is listed as a frequent contributor to *The Nation* and other periodicals. He is a professional writer and belongs to a type of contributors who are getting to be very numerous and their names appear with great regularity in our so-called best magazines. Their principal claim to be heard lies in a ready pen and a certain ability to collect a wide range of superficial knowledge which they dramatize by over-emphasis and frequent distortion of facts which they have neither the time nor ability to learn. Anyone familiar with the record of the A. M. A. in its effort to protect the public from the abuses arising from dishonest advertising of all matters pertaining to health knows how false are the charges made in this article in *The Nation*. If the misstatements made are a sample of what may be expected from the pen of professional writers and their first cousins, the columnists, then the reading public will find as much dishonesty and falsehood in the reading section of our periodicals as upon their advertising pages.

IN an address before medical men a prominent layman had this to say:

"The assumption that the physician should give gratuitous service to people who are unable to pay has come down through the whole history of medicine. That is an anomaly. There is no other field of enterprise in which that is expected. To view the situation by and large, it is not expected in industry, in trade, in congress, in law, or in architecture. All other professional men expect to be paid for the service they render. If service is to be given to those who are unable to pay then it is provided for through organizations especially equipped to do that kind of work. I was in charge of a relief organization for nine years. If families came to us in need of rent, food, or clothing, I did not go to the landlord and ask him to give them free rent, or to the baker and ask him to give free bread, nor to the tailor and ask him to supply free clothing. We went out and raised funds with which to purchase these commodities and pay for them, so that the family could go on. But for years the medical profession has gone on the supposition that its task is to care personally for the sick whether or not they have funds to pay for such care, and if you follow that clue you will see that it has entered into the whole fabric of the medical profession. The hospital fundamentally has been a charitable institution. It is run by laymen. These laymen organize on a semi-charitable basis. The physician and the nurse who come in are expected to give service gratuitously, and you see what our present hospital structure is. The physician enters as an intern without pay for his service. After his internship is completed he is connected with the out-patient or in-patient service. Most of his time is given gratuitously, and for a period of years this is expected of him. In this sense the physician is a gambler. He is expected to be a gambler. He is to give years of his time without adequate compensation in the hope that eventually suitable contacts will be made and he will be able to establish a practice that will make him self-supporting. There are thousands of men in the profession today who are just about scraping along, and many have to resort to rather devious practices. This may not be true in the smaller communities, but it is true in the larger sections. In New York City today the problem of fee-splitting is an acute one, and one that the average physician finds it difficult to fight. On the other hand, he is facing the complication of giving gratuitous medical care that is placing him in a very disadvantageous position. The outlook is difficult to determine.

"Experiments now are being made in various forms of medical practice. We have the development of the group clinic, the pay clinic, and the medical center. The group clinic is a clinic conducted entirely by physicians in one district on a

professional pay basis while the entire cost of equipment and everything has been met by the physicians themselves. The pay clinic is likewise a semi-philanthropic clinic, because buildings have been given by endowment or private individuals. In other words the whole cost is not included in the charge that is made by the clinic for the service rendered, and in many instances the physician is expected to give his services, if not entirely free, at a cost not commensurate with what he has had to pay out for his education, etc. The medical center is another development. There are two such centers in New York. The medical center in Washington Heights—the other at Cornell Center which is about to be opened. They are very distinctly evolutionary. The fact is they are great big semi-philanthropic or altruistic institutions, the buildings of which have been erected at an expense of millions of dollars, they are equipped with competent men and with every facility known to the medical profession, and they are offering service in competition with the individual practitioner in that district, and even from a distance.

"As an evidence of the promptness and adequacy of the service rendered by these medical centers, an illustration is cited. A child suspected of having a mastoiditis was taken by the mother to one of these well-equipped and well-financed medical centers in New York at 2:30 p. m., and between that time and 6:30 p. m. the child had received a thorough examination, including blood count and x-ray pictures, had been operated by competent surgeons, and ignoring the advice of the hospital the patient had been returned to her home at 6:30 p. m. The total expense was fifty-five dollars. Had the case been handled in the usual way by the family physician it would have taken not only very much more time for separate examinations by specialists and x-ray operators, additional time in hospital entrance, securing of a nurse, and last but not least a total expense that probably would have been prohibitive. No practitioner could compete with such service on the part of a medical center, and very naturally the general practitioners in the vicinity of these medical centers are putting up a howl that is doing them no good.

"The situation is one that requires the careful consideration of the medical profession if it is going to meet the very rational complaint concerning the cost of medical care. What is being done by communities is also being done by large industrial organizations, and right now some of the largest corporations in the country are considering very seriously the advisability of introducing a system whereby all of their employees, no matter where located, may have the advantage of medical and hospital attention at a nominal cost. The head of one large corporation already has stated that if his organization goes into the thing it will be in a big way. What will it mean to the private practitioner of medicine if any one or all of these various schemes for furnishing adequate medical, surgical and hospital attention at a reduced cost prevails generally throughout the country? The physicians individually and collectively are giving this subject no constructive thought. They are standing off and throwing brick-bats at everyone who talks about any of these schemes for lowering the cost of medical care, and yet in the last analysis physicians are the ones who are vitally interested in this subject, and should be the ones to formulate and adopt a remedy for the ills which beset the public and profession today.

"Will the medical profession have state medicine, health insurance, or individual and community contract practice as described? Will the physician of the future work independently, or on a collective or cooperative basis, or will he lose his individual identity entirely and become submerged in a great machine employed by the state or by industrial organizations? Will the medical profession look at this problem squarely in the face and help to decide how to distribute the cost of sickness so that it may be met by the people, and members of the medical profession not suffer financially through any program adopted? Much will be accomplished if the medical profession arrives at a definite plan whereby its ability and resources may be coordinated and used economically for the benefit of the public as well as the medical profession. This means readjustment, but readjustments are the order of the day in the world, and the medical profession cannot escape joining in the march of progress.

DEATH NOTES

ASHLEY W. MYERS, M.D., of Monroe City, died April 18th, aged sixty years. Doctor Myers graduated from the Medical College of Indiana, Indianapolis, in 1902.

BENJAMIN W. COOPER, M.D., of Connersville, died April 19th, aged fifty-seven years. Doctor Cooper graduated from the University of Louisville School of Medicine in 1907.

P. T. OLIPHANT, of Bloomington, died May 5th, aged eighty-eight years. Doctor Oliphant had not practiced for several years. He obtained his medical education through apprentice work.

WILBUR A. BOYDEN, M.D., of Anderson, died April 19th, aged seventy-four years. Doctor Boyden graduated from the Central College of Physicians and Surgeons, Indianapolis, in 1885.

HERMAN K. EHRLICH, M.D., of Laporte, died April 19th, aged eighty-eight years. Doctor Ehrlich had retired from active practice. He graduated from the College of Physicians and Surgeons, Keokuk, Iowa, in 1872.

J. C. MAST, M.D., of Elkhart, died May 2nd, aged sixty-three years. Doctor Mast was a member of the Elkhart County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Detroit College of Medicine and Surgery in 1894.

EUGENE HAWKINS, M.D., of Greencastle, died May 22nd, aged seventy-five years. Doctor Hawkins was a member of the Putnam County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1878.

LEON BARBAZETTE, M.D., of Terre Haute, died May 1st, in Phœnix, Arizona, where he had gone for his health. Doctor Barbazette was forty years of age. He was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the St. Louis University School of Medicine in 1915.

JOHN A. SUTCLIFFE, M.D., of Connersville, died at Martinsville, May 18th, aged eighty-six years. Doctor Sutcliffe was emeritus professor of genito-urinary surgery in the Indiana University School of Medicine. He retired from active practice several years ago. Doctor Sutcliffe was a member of the Fayette County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Bellevue-Hospital Medical College, New York, in 1872.

NEWS NOTES AND PERSONALS

DR. R. LEE SMITH, of Osgood, and Miss Luella Logan, of Dayton, Ohio, were married May 5th.

DR. A. J. HOSTETLER, of Lagrange, is in Miami, Florida, where he has gone for an extended rest.

DR. DORSEY M. HINES, of Auburn, has been made secretary of the city board of health to succeed his father, the late Dr. F. M. Hines.

THE regular monthly meeting of the Lake County Medical Society was held at Crown Point, May 14th, at the Tuberculosis Sanatorium.

DR. FRED MCK. RUBY has announced that he has resumed his practice, limited to diseases of the eye, ear, nose and throat, in Union City, Indiana.

THE Hendricks County Medical Society met at Pittsboro, May 15th. A chicken dinner was served, following which the physicians held a business meeting.

DR. AND MRS. LOUIS A. SANDOZ recently have returned to their home in South Bend from Europe, where Doctor Sandoz has been doing post-graduate work.

AT the June 11th meeting of the Tippecanoe County Medical Society Dr. W. W. Washburn presented a paper on "Post Hospital Prostatic Progress".

DR. E. B. MUMFORD was the principal speaker before the Madison County Medical Society, May 19th. A chicken dinner was served at Vestal's farm, following which Doctor Mumford held a clinic.

THE Wayne-Union County Medical Society met at the Richmond-Leland Hotel, Richmond, May 21st. Dr. Louis Segar, of Indianapolis, presented a paper on "Some Recent Advances in Pediatrics".

THE Laporte County Medical Society held a meeting at Laporte, May 21st. Dr. H. O. Mertz and Dr. H. O. Ochsner, of Indianapolis, presented papers. There were forty-nine in attendance at this meeting.

THE U. S. Civil Service Commission announces open competitive examinations for social worker (psychiatric) and junior social worker which will be rated as received by the Commission at Washington, D. C., until June 30, 1931.

THE Cass County Medical Society held its meeting April 23rd, at Logansport. Dr. Joseph Rubsam presented a paper on "Acute Leukemia" and Dr. John Bradfield talked on "Lymphatic Leukemia". Case reports were presented.

AT the April 23rd meeting of the St. Joseph County Medical Society, held at the University Club, South Bend, Dr. Harry A. Singer, of the University of Illinois, presented a paper on "The Form Fruste Type of Perforated Peptic Ulcer".

THE Jasper-Newton County Medical Society met in Rensselaer, April 24th, with Dr. E. C. English as host. Dinner was served at the Makeever Hotel, following which Dr. D. O. Kearby, of Indianapolis, presented a paper on "Sinus Infection."

DR. GEORGE MOORE presented a paper on "Blood Transfusions" before the May 19th meeting of the Delaware-Blackford County Medical Society at the Hotel Roberts, Muncie. The various methods of blood transfusion were shown by moving pictures.

THE last seminar of the I. U. School of Medicine, for the present school year was held May 22nd, and was the occasion of the annual Alpha

Omega Alpha lecture which was given by Dr. Charles P. Emerson on the subject, "The Neurasthenic Reaction."

THE published book of Proceedings of the Minneapolis assembly of the Interstate Postgraduate Medical Association of North America is now available and may be procured through the office of that organization at 759 North Milwaukee Street, Milwaukee, Wisconsin.

THE Jay County Medical Society held a meeting at the Court House, Portland, June 5th. F. E. Keeling, M.D., and A. C. Badders, M.D., presented papers, Doctor Keeling's subject "The Medical Abdomen" and Doctor Badders' subject, "The Surgical Abdomen".

THE Daviess-Martin County Medical Society held a meeting at Shoals, May 6th. Dr. George M. Cropp was host for the dinner at his home, and a scientific meeting was held at the Chamber of Commerce following the dinner. Twenty-one doctors and dentists were present.

THE Howard County Medical Society held a meeting at Kokomo, May 1st. Dr. James H. Stygall, of Indianapolis, presented a paper on "Problems of Lung Diagnosis and Treatment". This was accompanied by talking moving pictures. The meeting was preceded by a banquet for the twenty-five members present. This was the last meeting until the fall season.

DR. SIMON P. SCHERER, Martinsville, Indiana, attended the meetings of the American Medical Association and the American Physical Therapy Association in Philadelphia. Dr. and Mrs. Scherer and others motored to the medical meetings and other points of interest in the East.

AT the May 14th meeting of the Tippecanoe County Medical Society, held at the Lincoln Lodge, Lafayette, Dr. F. E. Senear, professor of dermatology, University of Chicago, presented a paper on "The Significance of Pruritis in General Medicine". Doctor Senear held a clinic on skin diseases at St. Elizabeth's Hospital in the afternoon.

DR. B. G. KEENEY, of Shelbyville, presented a paper on "Biology of Renal Function" at the meeting of the Sixth District Medical Society, held at Magnesia Springs, near Brookville, May 28th. Papers also were presented by Dr. George S. Bond, of Indianapolis; Dr. Charles R. Sowder, of Indianapolis, and Dr. W. R. Phillips, of Orange.

A NEW auxiliary recently has been added to the State Auxiliary—the Auxiliary to the Lawrence County Medical Society at Bedford—was organized May 5th with nineteen members. Officers were installed as follows: President, Mrs. Harold McKnight, Bedford; vice-president, Mrs. Harry Ragsdale, Bedford; and secretary-treasurer, Mrs. Robert Smallwood, Bedford.

THE U. S. Civil Service Commission announces open competitive examinations for medical officer, associate medical officer and assistant medical officer, general medicine and surgery, to fill vacancies occurring in the federal classified civil service throughout the United States. Applications will be rated as received by the U. S. Civil Service Commission at Washington, D. C., until June 30, 1931.

APPROXIMATELY one hundred physicians attended the annual session of the Elkhart County Medical Society at Goshen, April 16th, at the Alderman Hotel. Papers were presented by Dr. Henry Buxbaum, of the University of Illinois; Dr. Archibald Hoyne, of Rush Medical College; Dr. J. H. Warvel, of Indiana University School of Medicine; and Dr. N. M. Percy, of the University of Illinois.

THE Chicago Medical Society will present postgraduate clinics at the Cook County Hospital, Chicago, June 22 to July 3, 1931. Registration is open to all members of the American Medical Association and its component societies. Registration fee is ten dollars. Information may be obtained by addressing the Chicago Medical Society Postgraduate Clinics, 185 North Wabash Avenue, Chicago.

DR. GEORGE M. SMITH has been made general secretary of the four Methodist hospitals in Indiana, including the institutions in Indianapolis, Fort Wayne, Gary and Princeton. Doctor Smith also was made superintendent emeritus of the Indianapolis Methodist Hospital, of which he has been superintendent for several years. Dr. John G. Benson has been placed in active charge of that institution.

THE Ninth District Medical Association held its annual meeting in Lebanon, May 28th. The Boone County Medical Society was host for the meeting. A golf tournament was held at the Ulen Country Club during the morning, and in the afternoon from two to five o'clock a scientific program was presented. A banquet for the physicians and their wives was enjoyed at the Country Club, followed by a scientific paper.

FOUR universities will offer courses for the training of teachers and supervisors of sight-saving classes this summer, as follows: Tulane University, New Orleans, June 15th to July 24th; University of Chicago, June 22nd to July 24th; State Teachers' College, Buffalo, New York, June 29th to August 7th; and Teachers' College, Columbia University, New York, July 6th to August 14th.

THE U. S. Civil Service Commission announces open competitive examinations for chief nurse (Indian Service) head nurse (Indian Service), graduate nurse (various services), and graduate nurse, visiting duty (various services). Examinations are to fill vacancies in the Departmental Service, Washington, D. C., Veterans' Administration, Public Health Service, and Indian Service. Applications will be rated as received at Washington, D. C., until June 31, 1931.

THE reunion meeting of the Indiana University Medical Class of 1906 was held on May 18th of this year in Indianapolis. There were about fifty of the members present. They were edified by a number of wonderful clinics in the auditorium of the University and feted to a free luncheon in Riley Hospital and closed the day with a banquet at Woodstock Country Club, when more than a hundred of the members and their wives were present. Dr. E. D. Clark, of Indianapolis, was the speaker of the occasion.

THE forty-fifth annual meeting of the Eleventh Indiana Councilor District Medical Association was held May 21st at Delphi. In the afternoon papers were presented by the president, C. S. Black, M.D.; Edmund D. Clark, M.D., Indianapolis; John A. McDonald, M.D., Indianapolis, and E. O. Harrold, M.D., Marion. A banquet was served at the Presbyterian Church, with Dr. C. M. Kennedy as toastmaster, which was followed by an hour of entertainment. The ladies were entertained at the Delphi Country Club.

THE meeting of the Twelfth District Medical Society was held in Fort Wayne, May 26th. Dr. L. R. Dragstedt, of the University of Chicago, presented a paper on "Acute Intestinal Obstruction" which was illustrated with lantern slides. Dr. C. Dale Christie, of Western Reserve University, talked on "Diabetes Mellitus". Dr. H. L. Murdock, of Fort Wayne, was elected president of the society, succeeding Dr. M. B. Catlett, of Fort Wayne; Dr. John Thomson, of Garrett, was elected vice-president, and Dr. A. J. Sparks, of Fort Wayne, secretary-treasurer. Dr. E. M. Van Buskirk was elected councilor for the district to succeed Dr. H. O. Bruggeman, who resigned.

THE annual secretaries' conference of the Indiana State Medical Association was held at the Athenæum, Indianapolis, May 26th. In the afternoon papers were presented by Dr. Chester A. Stayton, Indianapolis; Dr. J. C. Burkle, Lafayette; Dr. D. W. Schafer, Fort Wayne; and Dr. M. A. Austin, Anderson; Dr. A. M. Mitchell, Terre Haute; and Dr. H. C. Wadsworth, Washington. At seven o'clock a joint dinner meeting was held with the Indianapolis Medical Society, at which Dr. E. D. Clark, of Indianapolis, presided. Papers were presented, following the dinner, by Dr. A. E. Bulson, of Fort Wayne; R. G. Leland, of Chicago, and Dr. Harry M. Hall, of Wheeling, West Virginia.

A JOINT meeting of the Vigo County Medical Society, the Fifth District Medical Society and the Terre Haute Academy of Medicine was held at the Terre Haute House, Terre Haute, May 1st. Dr. John Albert Keys, professor of orthopedics, Washington University, St. Louis, talked, his subject being "Reaction of Joints to Disease and Injury". Each society held its own business meeting. At the meeting of the Fifth District Medical Society the following resolution was adopted as read: "In the course of medical events it has become increasingly evident that the Fifth District deserves recognition in the Indiana State Medical Association; and, Whereas, Dr. Joseph H. Weinstein, of Terre Haute, Indiana, was for years our faithful councilor and adviser, a man of the highest standing professionally, a man who would honor our district as well as the state as president of the Association, therefore be it, Resolved, that the Fifth District Medical Society in convention here assembled do endorse him for that position and hereby pledge our united efforts in every honorable way for the accomplishment of that aim."

IN addition to the articles enumerated the following has been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Ciba Company, Inc.:

Ampules Solution of Nupercaine-Ciba, 25 cc., 1:1000.

INDIANA UNIVERSITY NEWS NOTES

DR. R. N. HARGER, of the Indianapolis division of the I. U. Medical School, spoke before the Crawfordsville Rotary Club May 20th. He spoke on "Recent Scientific Evidence on the Alcohol Question".

DR. B. D. MYERS, of the Indiana University School of Medicine at Bloomington, attended a meeting of the medical council of the I. U. School of Medicine in Indianapolis May 9th.

JACK E. DITTMER, of Kouts, and James S. Browning, of Brownstown, have been pledged to the Phi Chi professional medical fraternity at the I. U. School of Medicine, Bloomington.

RALPH BARNETT, of Trafalgar, student in the I. U. School of Medicine at Bloomington, gave a talk on "Personality in Its Relation to the Physician" before the May 21st meeting of the Theta Kappa Psi honorary professional medical fraternity.

COURSES in the I. U. School of Medicine, requirements for admission, and graduation, living expenses, opportunities for self-help and other important features are included in the bulletin recently issued by the Indiana University School of Medicine through the publications office.

DR. HELEN P. LANGNER, director of the child guidance clinic, I. U. School of Medicine, Indianapolis, spoke at the Central High School of Evansville Monday evening, April 20th, on "Mental Health and Behavior". On April 27th she spoke at the same place on "Mental Hygiene in Everyday Life".

DR. THURMAN B. RICE, of the Indiana University School of Medicine at Indianapolis, spoke before the Jeffersonville Parent-Teacher Association of Junior High School May 13th. He discussed "Juvenile Tuberculosis". He also spoke at Logansport on May 19th. This was a follow-up on the White House Conference.

"INSURANCE for Physicians, Surgeons, Hospitals and Dentists" was the subject of an address which J. D. O'Meara, general agent and legal counsel in Indiana for the Medical Protective Company, of Chicago, gave recently before the members of Prof. Fred V. Chew's class in casualty insurance of the I. U. School of Commerce and Finance.

HOWARD STELLNER, of South Bend, a student in the Bloomington division of the I. U. School of Medicine, spoke before the Theta Kappa Psi professional medical fraternity May 7th on "Sympathetic Ganglionectomy". R. B. Hart, of Columbus, also a student in the Bloomington division of the medical school, gave an address on "Rehabilitating the Tubercular".

DR. ELMER GOSS, resident physician at St. Vincent's Hospital, Indianapolis, spoke before the spring banquet of the Theta Kappa Psi professional medical fraternity at the Indiana University School of Medicine, Bloomington. The banquet was held at the Graham Hotel Friday evening, May 22nd. Dale D. Dixon, secretary of the Indianapolis chapter of the fraternity, acted as toastmaster.

COURSES in the Indiana University School of Medicine at Bloomington will be offered this summer from June 17th to August 12th, according to the I. U. Summer School bulletin. During the coming summer short courses beginning June 17th and lasting for six weeks will be offered to the physicians of Indiana by the I. U. School of Medicine at Indianapolis. Unusual clinical and laboratory facilities are available for these courses and opportunity is offered for graduate study.

DR. I. LESTER FURNAS, who received the D.D.S. degree from Indiana University in 1910 and for ten years professor of prosthetics in the I. U. Dental School, will be a member of the U. S. Public Health Service's annual expedition to the Arctic this summer. He will make an investigation of Eskimo health habits and the relation between their food and the condition of their teeth, the first survey of the kind to be undertaken. He now is professor of dentistry in Western Reserve University, Cleveland, Ohio.

WORK of the Indiana University Medical Center at Indianapolis was described to the members of the Indiana University Club at their April 28th meeting at the Columbia Club, Indianapolis, by Dr. Charles P. Emerson, dean of the I. U. Medical School at Indianapolis. Resident physicians who described the work of their divisions were: Dr. George Garceau, orthopedics; Dr. Edward G. Billings, medicine; Dr. Frank Ramsey, surgery; Dr. H. F. Call, pediatrics; and Dr. R. S. Sage, nose and throat. The luncheon was in honor of the medical school graduates of the University.

DR. B. D. MYERS, dean of the I. U. School of Medicine at Bloomington, delivered an address on "Child Health" before members of the Bedford Lions Club recently. Doctor Myers told of the recent White House conference of nationally known physicians which was held in the interest of child health. Doctor Myers spoke before the Petersburg Kiwanis Club May 6. He also was the principal speaker at the Foundation Day celebration which Shelby county I. U. alumni and former students held May 6th in Shelbyville. At this latter meeting Doctor Myers was introduced by Dr. R. W. Gehres, Shelbyville physician, graduate of the I. U. Medical School.

DR. CHARLES P. EMERSON, dean of the I. U. School of Medicine at Indianapolis, will leave in October for the Far East, where he will go as one of twelve members of a commission of church laymen who will study missions. Doctor Emerson will be with the commission approximately nine months. Dr. W. E. Hocking, professor of philosophy at Harvard University, is chairman of the commission. The commission is not church or mission supported but is composed of prominent laymen. It will study to determine a future program of missions for the Far East rather than what already is being done, and will make a report and recommendation as to what, in the opinion of its members, should be done in the immediate future.

DR. BERT ELLIS, who was graduated from Indiana University in 1921, spoke before the spring banquet of the Phi Chi professional medical fraternity at the I. U. School of Medicine, Bloomington, which was held at the Graham Hotel, May 21st. Dr. Jacob A. Badertscher, of the I. U.

anatomy department, was the guest of honor at the banquet. He was presented with a laboratory clock as a gift from members of the fraternity. The banquet committee was composed of Rex Dixon, Anderson; Robert McElroy, Scotland; James McElroy, Scotland; and John Combs, Koleen. Doctor Ell's explained to the members of the fraternity that there is a present-day tendency in the arrangement of medical school curricula that enables students to have opportunity for externeships as well as interneships.

Dr. Alfred Henry, member of the Indiana University School of Medicine faculty at Indianapolis, and nationally known scientist in the anti-tuberculosis field, has been elected president of the National Tuberculosis Association. Doctor Henry was elected to this office at the twenty-seventh annual convention of the association at Syracuse, New York, the middle of May. President Hoover, Dr. W. H. Welch, of Baltimore, and Dr. Theodore Smith, of Princeton, New Jersey, were elected honorary vice-presidents. Active vice-presidents elected were: Dr. John H. Peck, of Des Moines, Iowa, and Dr. Willard B. Soper, of New Haven, Connecticut. Dr. C. J. Hatfield, of Philadelphia, was elected secretary and Dr. Henry B. Platt, of New York City, treasurer, and his son, Collier Platt, of New York City, assistant treasurer.

Nu Sigma Nu, professional medical fraternity, held initiation for sixteen men at the Lincoln Hotel in Indianapolis May 8th. Following the initiation there was a banquet which was attended by many alumni of the organization. A dance was held in honor of the newly initiated men at the Claypool Hotel on the night of May 9th.

The initiates were students of the I. U. School of Medicine at Bloomington. They were: Norman R. Booher, Lafayette; McKinley J. Bohannon, Terre Haute; William D. Hart, Anderson; Ben Mankowski, Detroit, Michigan; W. W. Brown, Indianapolis; Ermil Leslie, Folsomville; William J. Clauser, Delphi; Robert D. Spindler, Cedar Lake; Charles F. Schneider, Evansville; Frank W. Oliphant, Indianapolis; A. S. Woodard, Indianapolis; Charles A. Fiel, Indianapolis; David E. Engle, Frankfort; Robert J. Fraser, Marion; J. Thomas Hardesty, Marion; and Max D. Garber, North Manchester.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

April 21, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., James H. Stygall, M.D., and Thos. A. Hendricks, executive secretary.

The minutes of the meeting of the Bureau on April 6th as corrected read and approved.

Minutes of the meeting of April 14th read and approved.

The release, "Correspondence Schools for Nurses," prepared for publication Saturday, April 25, 1931.

Radio release, April 18—"Rabies or Hydrophobia."

Radio talk for May 9th by Child Health Week Committee, "Prenatal Care." Copy of talk reviewed by the Bureau. Suggestion made that it be revised so as to be more suitable for radio talk.

Request for speaker:

April 23—Montgomery County Medical Society, Crawfordsville, Indiana. Speaker selected.

Letters received from the Indiana State Library acknowledging the receipt of a check for $50.00 from the Bureau of Publicity, which is to be used as part payment for the photostating of the diary of Dr. Asahel Clapp, of New Albany, who was elected president at the first meeting of the State Medical Association in 1820 when it was organized in Corydon. One of the letters from the State Library follows in part:

"I sincerely hope that the diary will be of sufficient use to the State Medical Association to justify this expense and I am so glad that the information contained in it has been saved for Indiana."

The other letter reads as follows:

"The check for $50.00 to be used for phostating the diary of Dr. Asahel Clapp, of New Albany, has been received and I wish to thank you personally for your interest and cooperation in this matter. I am sending a formal acknowledgment of the gift to Dr. Wishard. Such help and encouragement on the part of your Bureau of Publicity is very inspiring and I hope that the Association will find that the diary is well worth the expenditure of the money.

"I have just sent to New Albany for a photograph of Dr. Clapp and I think it is quite possible that Mrs. Rabb or someone will give some publicity in a feature article to the generosity of the State Medical Association."

It is understood with the representative of the Library that the Indiana State Medical Association has the right to publish any part of Dr. Clapp's diary in the Indiana State Medical Association Journal at any time it sees fit.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 28, 1931.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

Monthly Report, May, 1931

Morbidity reports were received from eighty-eight counties in the state. Pulaski, Scott and Steuben counties sent in negative reports. No report from Warrick county. There were 8,008 cases of diseases reported during the month, 5,570 cases from the urban and 2,438 from the rural population (urban including cities of 2,500 population and over, rural all under 2,500 population). 426 negative report cards were received. The name and number of diseases from the urban and rural population are shown as follows:

Disease	Total	Urban	Rural
Tuberculosis	931	234	697
Chickenpox	364	326	38
Measles	4501	3479	1022
Scarlet fever	913	586	327
Smallpox	541	341	200
Typhoid fever	11	7	4
Whooping cough	344	302	42
Diphtheria	81	61	20
Influenza	48	0	48
Pneumonia	23	7	16
Mumps	205	194	11
Poliomyelitis	0	0	0
Meningococcus meningitis	35	27	8
Trachoma	1	0	1

Undulant fever	4	3	1
Ophthalmia neonatorum	2	1	1
Hydrophobia	1	0	1
Encephalitis	1	0	1
Tetanus	2	2	0

The general trend for the month is a decrease in the number of cases of diseases reported except measles, smallpox and tuberculosis, which is normal for the season.

Measles is the most prevalent disease; 4,267 cases the previous month. The corresponding month the preceding year 800 cases were reported. The disease appears to be epidemic throughout the country.

Smallpox. The reported incident of the disease (541) shows an increase over last month when 436 cases were reported. The same month last year 689 cases. The normal average for the last five years is 413 cases.

Tuberculosis shows an abnormal increase; 228 cases the previous month; 279 cases in May of last year. The increase is on account of the entire number of cases in the State Sanatorium being reported. It makes Parke county report 565 cases. No doubt, some duplications will be shown; if so these will be eliminated. The object of this procedure is to arrive at the present status of all the state institutions.

Scarlet fever is on the decline; 1,165 cases were reported the preceding month; 689 cases the corresponding month the previous year. The estimated expectancy was 581 cases. The estimate is made on the experience of the last seven years. The disease will decline rapidly during the warm summer months. It is a cold weather disease.

Typhoid fever made a two-point decline over the previous month. Last year, same date, eighteen cases were reported. The normal average for May is twenty-six cases. The disease will increase gradually until late autumn.

Diphtheria. A substantial decline is noted over the previous month when 107 cases were reported. The average for May in the estimated period is seventy-four cases. The season's decline will be noticed for diphtheria, which is true of all other communicable diseases, except typhoid fever.

Meningococcus Meningitis. The reported incident of meningococcus meningitis, thirty-five cases, shows a decline of eleven cases over the previous month. The corresponding month the previous year thirty cases were reported. In May of 1929 only four cases were reported but one hundred cases were recorded in that year. The present prevalence is due to the hang-over of the last two years. Who and where are the carriers?

DR. H. W. MCKANE,
Collaborating Epidemiologist,
Indiana State Board of Health.

INDIANA VENEREAL DISEASE CLINICS

New cases (never previously admitted)	365
Total number of old cases and readmissions under treatment during month	5,561
Number of cases discharged as arrested or cured during month	255
Number of cases discontinued treatment without permission	263
Total number of cases remaining under treatment during month	5,408
Number of male syphalitic cases remaining under treatment during month	2,659
Number of male syphilitic cases remaining under treatment during month	1,720
Total number of syphilitic cases remaining under treatment during month	4,379
Total number of treatments during month	11,847
Total number of visits to clinic for treatment, examination or advice	15,662

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	200
Gonorrhea	116
Chancroid	1

During the month seven hundred sixteen pamphlets were distributed. Seven hundred one were mailed upon receipt of fifty requests and fifteen were sent to three people on our own initiative.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its monthly dinner meeting April 22, 1931, at 6.30 p. m. in the Indiana University club rooms at South Bend with President Lyon presiding.

The guest speaker was Harry A. Singer, M.D., assistant professor of medicine, University of Illinois. Doctor Singer's subject was "The Forme Fruste Type of Perforated Peptic Ulcer". Doctor Singer explained what is meant by the Forme Fruste type of perforated peptic ulcer; gave its usual location and why so often not found. He showed many x-ray plates and lantern slides of cases, stressing the necessity of early diagnosis and early operation in the first twenty-four hours.

This interesting paper was discussed by Doctors Giordano, Edgar Myers, Sensenich, Sandock, Bishop, and Borley.

The St. Joseph County Medical Society held its regular meeting in the Public Library, April 28, 1931, with President Lyon in the chair.

The application of Dr. John D. Skow for membership was read and referred to the Board of Censors.

The paper of the evening, "Strabismus from the Standpoint of the General Practitioner," was given by Dr. Martha Lyon. Doctor Lyon based her paper on 131 cases of strabismus seen by her during the years 1926 to 1931. The ages of these cases which were fitted with glasses after atropine cycloplegic ranged from eighteen months to thirty-seven years, the greater number coming in around six to seven years when children first started to school. The majority of the cases of strabismus were of the convergent type due to ametropia. Seventy percent of the eyes straightened and the vision improved with the wearing of glasses prescribed, correcting the full amount of the error, not taking off any for the accommodation. She made a plea for early refraction of children with strabismus and putting on glasses between the ages of eighteen months and three years in order to straighten the eyes; to preserve vision in the squinting eye and to better develop the fusion center. Doctor Lyon's paper was illustrated by lantern slide-pictures of children having strabismus first without glasses, then with them.

The paper was discussed by Doctors Savery, Linn, Pyle and Doctor Swihart, of Elkhart.

The St. Joseph County Medical Society met May 5, 1931, in the Public Library with President Lyon in the chair.

Drs. Donald Grillo and Marion W. Hillman were elected unanimously to membership.

Doctor Geisler, chairman of the Public Relations Committee, made the following recommendations which were adopted unanimously, namely, "That a letter be sent by the secretary of our society to the president of the Visiting Nurses' Association to the effect 'that the St. Joseph County Medical Society will be pleased to cooperate with the V. N. A. through the Public Relations Committee of the society, to discuss and assist in problems relating to the profession and their relationship with the V. N. A. and their community work'."

"That members of the society should refrain from giving personal views and criticisms of welfare organizations of their work to the press. Their criticisms should be made in writing and submitted to the P. R. C., who will not only assist in seeking a remedy but will

also assist in holding down unnecessary half-baked newspaper comments.

"Recommends strict adherence to the spirit of Section 2, Article 6, 1929 revised Principles of Medical Ethics and that the following letter be sent by the secretary of the society to the president of the fraternal order: 'Replying to your communication of April 14th, addressed to the P. R. C. of the society, beg to advise the principle of ethics covering your problem prohibits any physician of this society to dispose of his services under conditions that make it impossible to render adequate services to his patient. The necessity of your request is an acknowledgment of the inadequate service rendered the members of your order under the existing plan adopted by your order. We know that your organization, a substantial member of this community, is inadequately cared for. Adequate service can be effective only through personal choice of physicians by your individual members. Tradition and experience have proven that not only the individual but the community is inadequately served under the existing plan. This secretary recommends that each member of your order be permitted to engage his own physician who in turn reports on your usual blank form to the physician who is an officer of your order and who will act merely in an administrative capacity'."

Doctor Geisler also reported that a definite attempt is being made in the Summer Round-up of the P. T. A. this year to summarize the findings of examinations made. A definite program of follow-up work during the summer months has been planned with the cooperation of the V. N. A., who have offered the services of one of the school nurses, who will be with that organization this summer. The Public Relations Committee and the V. N. A. will be in the position through the efforts of this nurse to determine definitely the efficacy of the Round-up. All corrections made as results of recommendations of the examining physicians will be tabulated and a comparative statement submitted.

The subject of the evening, "A Selection of Fracture Cases," was presented by Drs. R. B. Acker, W. H. Baker, and J. L. Wilson—Doctor Acker, "Fracture of the Neck of the Femur"; Doctor Baker, "Fracture of the Os Calsis"; Doctor Wilson, "Transverse Fracture of the Head of the Radius".

These papers were discussed by Doctors Green, Terry, Owen, Sullivan, and Fisher.

The St. Joseph County Medical Society held its regular meeting in the Public Library May 12, 1931, with Vice-president Doctor Cassidy in the chair.

Dr. Samuel Morgan, of New Carlisle, was unanimously re-elected to membership.

The paper of the evening, "Spinal Anesthesia," was read by Dr. G. M. Rosenheimer.

Doctor Rosenheimer reviewed the history of spinal anesthesia from the early times and gave a most interesting account of its use at the present time. He stressed the advantages and the dangers of its use. He discussed the technique of its administration and cited those operative conditions in which its employment was most successful. The paper was discussed by Drs. Douglas Owen, Haley, Geisler, Hyde, Green and Eastman.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

SULLIVAN COUNTY MEDICAL SOCIETY

At the regular meeting of the Sullivan County Medical Society for the month of May the following program was presented:

Dr. J. A. Ikemire, of Palestine, Illinois, reported a case of multiple diverticulitis with carcinomatosis of the bowel. He was able to show x-ray pictures covering this patient for a period of about twelve years and reported findings at operation.

Doctor Ikemire also reported a case of colitis due to Bargen's diplococci. X-ray pictures and microscopic slides of this were also shown.

Dr. C. F. Briggs reported three cases of epidemic spinal meningitis with a comprehensive discussion of this disease.

Dr. J. B. Maple discussed the subject of "Dry Labor".

JAMES B. MAPLE, M.D.,
Secretary.

TWELFTH DISTRICT MEDICAL SOCIETY

The Twelfth District Medical Society met at the Shrine Temple, Fort Wayne, May 26, 1931, at 4:00 p. m.

The meeting was called to order by the president, Dr. M. B. Catlett, who then introduced Dr. C. Dale Christie, associate professor of medicine of Western Reserve University, who read a paper on "Problems in the Treatment of Diabetes Mellitus". The paper was discussed by Doctors Cornell, Weaver, and Buckner.

A banquet was served at the Shrine club rooms at 6:30, after which a paper and lantern slide demonstration was presented by Dr. Lester R. Dragstedt, professor of surgery, University of Chicago, Billings Memorial Hospital, on "Acute Intestinal Obstruction". The paper was discussed by Drs. M. F. Porter, Sr., Bruggeman, Cameron, Worley, Catlett, C. Dale Christie, Sparks, Caylor, Weaver and Wright.

At the business meeting which followed officers were elected. Doctor Bruggeman resigned as councilor, giving as his reason that his duties as trustee of the Indiana Reformatory interfered. Dr. E. M. Van Buskirk, Fort Wayne, was elected councilor; Dr. H. L. Murdock, Fort Wayne, was elected president; Dr. John Thompson, Garrett, was elected vice-president; Dr. A. J. Sparks, Fort Wayne, was elected secretary-treasurer.

There were sixty members present.

HARVEY L. MURDOCK,
Secretary-Treasurer.

FOURTH DISTRICT MEDICAL SOCIETY

The members of the Fourth District Medical Society met at Madison, May 28th, as guests of the Southeastern Indiana Hospital for the Insane.

The meeting opened in the auditorium of the hospital at eleven o'clock in the morning, with the president's address by Dr. N. A. Kremer, of Madison. Luncheon was served to the visiting doctors and their wives at twelve o'clock.

Following the luncheon, the House of Delegates of the Society held a meeting, at which time Columbus, Indiana, was decided upon as the place for the next annual meeting, and Dr. A. M. Kirkpatrick was elected president for the coming year; Dr. G. H. Kamman, of Seymour, vice-president; and Dr. J. K. Hawes, of Columbus, secretary.

During the afternoon the members of the staff of the hospital presented a clinic. Dr. D. W. Grear presented a paper on "Dementia Præcox", Dr. G. W. Hamilton talked on "Manic-depressive Psychosis" and Dr. G. A. Estel took as his subject "Neurosyphilis". Dr. C. Lee Keidel, of Lawrenceburg, presented a paper on "Infectious Mononucleosis". "Sterility" was the subject presented by Dr. J. E. Kennedy, of Cincinnati, Ohio, and Dr. A. B. Graham presented a paper on "Ano-rectal Diseases of Problems of the General Practitioner".

A banquet was given at the Hillside Hotel following the scientific program.

H. P. GRAESSLE, M.D.,
Councilor, Fourth District.

BOOK REVIEWS

Books Received Since May 1, 1931:

THE TREATMENT OF INJURY BY THE GENERAL PRACTITIONER. By Clay Ray Murray, M.D., F.A.C.S., Assistant Professor of Surgery, College of Physicians and Surgeons, Columbia University. Two volumes of 412 pages

with 196 drawings by the author. Flexible binding. Pocket size monographs. Price $5.00 for the two volumes. Harper & Brothers, publishers, New York and London, 1931.

HEART DISEASE. By Paul Dudley White, M.D., Instructor in Medicine, Harvard Medical School; physician to the Massachusetts General Hospital, Boston. 931 pages. Cloth. Price $12.00. The Macmillan Company, New York, 1931.

HANDBOOK OF PHYSIOLOGY. By W. D. Halliburton, M.D., LL.D., F.R.C.P., F.R.S., Emeritus Professor of Physiology, University of London, King's College; and R. J. S. McDowall, M.B., D.Sc., F.R.C.P. (Edin), Professor of Physiology, University of London, King's College. Nineteenth edition, 842 pages with numerous illustrations in the text, many of which are colored, and four colored plates. Cloth. Price $4.75. P. Blakiston's Son & Company, Philadelphia, 1930.

TEXTBOOK OF PHYSICAL THERAPY. Vol. I. By William Benham Snow, M.D., 708 pages, with 183 text cuts. Cloth. Price $10.00. Scientific Authors' Publishing Company, New York, 1931.

SURGICAL CLINICS OF NORTH AMERICA (Lahey Clinic Number). Vol. 11, Number 2, April, 1931. 248 pages with 88 illustrations. Per clinic year (February, 1931, to December, 1931), paper, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia and London, 1931.

CHEMISTRY FOR NURSES. Including Certain Essential Principles from Inorganic, Organic and Biochemistry. A Combined Text and Laboratory Manual. By Harry C. Biddle, A.M., Instructor in Chemistry, School of Nursing, Western Reserve University, etc. 336 pages with 74 illustrations. Flexible binding. Price $2.75. F. A. Davis Company, Publishers, Philadelphia, 1931.

FUNDAMENTALS OF DERMATOLOGY. By Alfred Schalek, M.D., Professor of Dermatology and Syphilology, University of Nebraska College of Medicine. Second edition, thoroughly revised. 247 pages with 58 engravings. Cloth. Price $3.00. Lea & Febiger, Publishers, Philadelphia, 1931.

Book Reviews:

CANCER. Its Origin, Its Development and Its Self-Perpetuation. A research by Willy Meyer, M.D., Consulting Surgeon to the Lenox Hill and Postgraduate Hospitals, New York Infirmary for Women and Children, etc. 427 pages. Cloth. Price $7.50. Paul B. Hoeber, Inc., New York, 1931.

This is the first book coming to attention devoted exclusively to the subject of cancer. It represents an enormous amount of careful clinical observation for a wide acquaintance with the literature of cancer. While not professing to be a work based upon original research, it has a distinctive value to the student of cancer, because of the completeness of its bibliographic references. Among these references foreign authors predominate. The author accepts at the outset a theory as to the origin of cancer. The book is devoted to a proof of this theory and a discussion of therapy based upon this theory. Chronic irritation plays the leading role according to this theory, in initiating the changes which ultimately develop into cancer. Systemic conditions consisting of marked degrees of alkalinity play their part. The book is an essential possession of the student of cancer.

ABDOMINO-PELVIC DIAGNOSIS IN WOMEN. By Arthur John Walscheid, M.D., Director of Obstetrics and Gynecological Department of Broad Street Hospital, etc. 1000 pages, with 397 illustrations and one color plate. Coth. Price $12.50. The C. V. Mosby Company, St. Louis, 1931.

This book is designed for undergraduate student's use. This does not mean that it is any less valuable for clinical reference to the practitioners of the diseases of women. However, the completeness of the work and especially its great detail from the standpoint of anatomy make its appeal stronger to the undergraduate than to the practitioner.

The author has drawn liberally from Jayle for his illustrations and descriptive anatomical detail. There seems to the reviewer a good deal of unnecessary writing, unless indeed the reader should be interested in original research, in which event the book would be of great value.

The fact is, an author cannot be both a student of research and a practical clinician and write a book of equal appeal to the two groups. It is, however, refreshing to encounter so thorough a work despite the fact a good deal of reading has to be done to find the answer.

COMPEND OF BACTERIOLOGY. By Robert L. Pitfield, M.D., Attending Physician, Germantown Hospital, Philadelphia; and Howard W. Schaffer, M.D., Pathologist to Memorial Hospital, Philadelphia. Fifth edition. 317 pages with 4 plates and 82 other illustrations. Cloth. Price $2.00. P. Blakiston's Son & Co., Publishers, Philadelphia, 1930.

As compends go this is a good one, though one could hardly expect a teacher of bacteriology to be enthusiastic about a book written for the express purpose of serving the "needs of the medical student in preparing for examination". We have been under the impression that the medical student would do well to use a real text throughout the whole semester in getting a real knowledge of an important subject. The mere purpose of passing an examination seems of relatively little importance. Furthermore, the "practitioner of medicine who desires to acquaint himself with the principal facts of the rapidly growing science of bacteriology" would do well to invest a little time and money in one of the standard text books. We feel strongly that there is no royal road to bacteriology, but if the reader of this review still believes that there is, we can strongly recommend this little book. As a compend it is excellent, but as a source of information in bacteriology we wouldn't give a nickel for it.

MEDICAL BIOMETRY AND STATISTICS. By Raymond Pearl, Sc.D., LL.D., Professor of Biology in the School of Hygiene and Public Health, and in the Medical School, Johns Hopkins University. 459 pages. Second edition, revised and enlarged. Cloth. Price $5.50. W. B. Saunders Company, Philadelphia and London, 1930.

We cannot but wonder why the publishers should consider this book of interest to general practitioners. The text is excellent, as is practically everything written by Doctor Pearl, but it is about a subject that practitioners know and care little about. Doubtless they *should* know about it, but there are so many things that seem so much more pressing that even the reviewer, who for reasons of his own must use vital statistics a great deal, would not think of urging the practitioner to read this book. Biometrics and statistics are extremely complicated and technical. The mere leafing through the book reveals a great many very formidable mathematical formulæ that promptly put a damper upon awakening ambition. We doubt for example if the general practitioner, struggling with a breech presentation, will find aid or inspiration in the heading, "Skew Correlation and Non-linear Regression" on page 386. It is not that we do not think the subject important—for indeed we do think that accurate biometrics are most important. Neither is it that we do not like this book, because really it is the only one of its kind that we have even been able to read through the first twenty pages. It is simply that we are using this review to say to our good friends who may possibly use this column as a guide to the buying of books that unless they have a particular and pressing need to use

fine statistics they had better save the money. On the other hand, in case they should have the ambition to use statistics in the preparation of a paper or something of the sort, they may do well to get this book, because it is the only one of its kind that anyone save a shark in mathematics can read and understand.

The book is beautifully printed and illustrated, and should serve a fine purpose as a textbook in a much neglected subject—a subject that in the past usually has been handled without mathematics—in which case it is usually inaccurate; or with a lot of mathematical formulæ—in which case it is not understandable. If this book can be Moses and lead the children of Hippocrates through the wilderness of figures that are vital statistics we shall be most grateful. It apparently has made the conscientious attempt to avoid inaccuracy on the left and impracticability on the right, but we are much afraid that it will be a long time before medical students or general practitioners can follow.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

REFINED AND CONCENTRATED ANTIPNEUMOCOCCIC SERUM, TYPE I-LEDERLE.—An antipneumococcic serum (New and Nonofficial Remedies, 1930, p. 351) prepared by immunizing horses with intravenous injections of cultures of Type I and Type II pneumococci. When test bleedings show the serum to have reached a sufficient degree of potency for type I pneumococcus, the horses are bled aseptically, the serum is refined and concentrated by the method of Lloyd B. Felton. The finished product contains type II pneumococcus antibodies, but not in therapeutically important amounts. It is marketed in packages containing 10,000 and 20,000 units of type I pneumococcus. Lederle Laboratories, Inc., Pearl River, New York.

POLLEN EXTRACTS-SWAN-MYERS.—The following pollen extracts-Swan-Myers (New and Nonofficial Remedies, 1930, p. 35) have been accepted: Mixed Grass Pollen Extract-Swan-Myers (Timothy, June Grass, Orchard Grass, Red Top and Sweet Vernal Grass in equal proportions); Russian Thistle Pollen Extract-Swan-Myers. Swan-Myers Company, Indianapolis, Indiana.—*(Jour. A. M. A.,* April 18, 1931, p. 1307).

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

DEL MAIZ BRAND, THE NEW CORN (Minnesota Valley Canning Co., Le Sueur, Minnesota).—A definite variety of corn standardized to taste and consistency with sugar, salt and water. The composition of the product is: Moisture, 74.6 percent; total solids, 25.4 percent; ash, 1.1 percent; reducing sugars, 0.6 percent; sucrose, 5.8 percent; protein, 2.7 percent; fat, 0.9 percent; crude fiber, 0.3 percent; total carbohydrates, 20.4 percent.

HECKER'S CREAM FARINA (Hearts of Wheat) (Hecker H-O Co., Inc., Buffalo, New York).—A wheat flour middlings or farina. A breakfast cereal. The approximate composition of the product is: moisture, 11.0 percent; mineral matter, 0.4 percent; fat, 1.1 percent; protein, 9.5 percent; crude fiber, 0.3 percent; carbohydrates, 77.7 percent. Heckers' Cream Farina is claimed to be an excellent, smooth, pure, wholesome cereal and to be almost entirely free from bran and roughage that may irritate the intestinal organs of the infant.—*(Jour. A. M. A.,* April 4, 1931, p. 1145).

PROPAGANDA FOR REFORM

VACCINO ANTIPIOGENO POLYVALENTE BRUSCHETTINI AND VACCINO ANTIGONOCOCCICO BRUSCHETTINI NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Vaccino Antipiogeno Polyvalente Bruschettini and Vaccino Antigonococcico Bruschettini are manufactured by Dr. Prof. A. Bruschettini, Genoa, Italy, and are marketed in the United States by the Pagano Drug Co. According to the label, Vaccino Antipiogeno Polyvalente Bruschettini is a bacterial vaccine made from Streptococcus (Hemolyticus and Viridans), Pneumococcus Frankel, Staphylococcus (Aureus and Albus), Staphylococcus Citreus Bacillus Prodigiosus, and Bacillus Coli; and Vaccino Antigonococcico Bruschettini is a bacterial vaccine made from Gonococcus, Pseudo-Gonococcus, Pseudo-Diphtheria Bacillus, Enterococcus, Staphylococcus (Albus and Aureus), and Staphylococcus Citreus. In 1918 the Council in refusing admission to a number of mixed vaccines announced as its attitude on this class of preparations "that there should be admitted to New and Nonofficial Remedies only those vaccine mixtures for which there is acceptable evidence to indicate that the use of the particular mixtures is rational". Since that time the Council has refused recognition to many vaccine mixtures for lack of acceptable evidence of their worth or rationality. No acceptable evidence for the Bruschettini vaccine mixtures was submitted; accordingly the Council declared them unacceptable for New and Nonofficial Remedies.—*(Jour. A. M. A.,* April 4, 1931, p. 1145).

NORMAN BAKER'S RADIO STATION KTNT.—Norman Baker, of Muscatine, Iowa, is known to the medical profession chiefly because he blackguards the profession and because he exploits alleged cancer cures as part of his many commercial activities. He is suing the American Medical Association for half a million dollars for alleged libel. Not long ago, Norman Baker applied for a renewal of his broadcasting license for his station, KTNT. The chief examiner for the Federal Radio Commission recently filed with the Commission his report recommending that the license be not renewed. It is reported that the Commission extended the license until April 30, 1931, pending final decision.—*(Jour. A. M. A.,* April 4, 1931, p. 1167).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food and Drugs Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Walker's Old Indian Fever Tonic, Walker's Dead Shot Colic Remedy, Walker's Indian Liver and Kidney Tonic and Walker's Pain-I-Cure (Cox & Simpkins): the first consisting essentially of epsom salt, quinine sulphate, iron (ferric) chloride, alcohol and water; the second containing wood alcohol 7.4 percent, ethyl alcohol, chloroform and sassafras oil; the third consisting essentially of epsom salt, quinine sulphate and iron (ferric) chloride; and the last consisting essentially of chloroform, alcohol and oil of sassafras. Barkin's Laxative Cold Tablets (Thomas F. Burch & Co., Inc.), containing acetanilid, caffeine, red pepper and podophyllin. Watkin's Cold Tablets (J. R. Watkins Co.), consisting essentially of acetanilid, cinchona alkaloid, resinous material and starch. F E I Solution (F E I Corporation), consisting essentially of boric acid, glycerin, a small amount of copper sulphate (blue vitriol), alcohol and water, flavored with oil of cassia. Life for Blood and Nerves (Standard Drug Co.), essentially extracts of plant drugs, including a laxative, in about thirteen percent of alcohol and water. Cre-Cal-Co (Creo Chemical Co.), consisting essentially of small amounts of creosote, traces of salts of calcium, magnesium and sodium, phosphates, chlorides and sulphates in water, colored with a red dye. H. H. H. Liniment (H. H. Moore & Sons), consisting

essentially of volatile oils including camphor and sassafras, with extracts of plant drugs, ammonia, soap, fifty-one percent of alcohol and water. Vapo-Cresolene (Vapo-Cresolene Co.), consisting essentially of cresol with small amounts of water and neutral oil. Prunidia (Standard Drug Co.), consisting essentially of extracts of plant drugs, with about twelve percent of alcohol. A. D. S. Pile Treatment (American Druggist's Syndicate), consisting essentially of an ointment with a petrolatum base, containing small amounts of tannin, carbolic acid and a tar derivative. A. D. S. Hepatic Salts (American Druggist's Syndicate), consisting essentially of glauber's salt, baking soda, sodium phosphate, table salt, citric acid and a small amount of a lithium compound. Bal-Sa-Me-A (Balsamea Laboratories, Inc.), consisting essentially of extracts of plant drugs, including rhubarb and leptotenia, a trace of chloroform, alcohol, sugar and water.—*(Jour. A. M. A.,* April 11, 1931, p. 1250).

LISTERINE.—The A. M. A. Chemical Laboratory reports on the chemical and bacteriological examination of Listerine. It finds the composition of Listerine essentially that of a solution containing 25 percent alcohol, 2.4 percent of boric acid, 0.4 percent of benzoic acid, with aromatic substances, chiefly thymol (about 0.75 percent). The Laboratory concludes that Listerine is a proprietary name for a solution of well-known substances which has little bacteriologic merit. If a physician desires to prescribe a complex weakly antiseptic mouth wash—and this is not to be recommended—he has at his disposal the well-known and nonsecret Antiseptic Solution N. F. (Liquor Antisepticus), which, like Listerine, has very poor antiseptic properties. The bacteriologic experiments show that Listerine will do little more than a weak hydroalcoholic solution of thymol. On dilution with four parts of water, it shows no bacteriologic action.—*(Jour. A. M. A.,* April 18, 1931, p. 1303).

ANNUAL MEETING OF THE COUNCIL ON PHARMACY AND CHEMISTRY.—The Council held its twenty-seventh annual meeting on March 27th and 28th. Among the subjects considered, those of special interest to the medical profession were: It was decided to permit the advertising of products accepted for New and Nonofficial Remedies in professional journals intended for dentists, pharmacists, nurses and veterinarians, provided such advertising does not invite or encourage use by unqualified persons. The Council decided that the submitted evidence did not warrant recommendations for the use of gynergen in exophthalmic goiter. It was decided that ovary preparations, except those containing and standardized for the follicular hormone, be omitted from New and Nonofficial Remedies with the close of 1931 unless new and favorable evidence develops. The Council voted to include in New and Nonofficial Remedies a statement of the dosage of cod liver oil which shall be based on the opinions obtained from leading pediatricians. The Council approved a proposal that a joint committee of the Council and the Committee on Foods arrange for the publication of a series of articles on the present status of our knowledge of vitamins A, B, C and D. It was decided to invite manufacturers of cod liver oil preparations included in New and Nonofficial Remedies to propose a uniform method for the determination of vitamin A and vitamin D potency which they would like to have the Council provisionally adopt. It was the general opinion of the Council that claims for the "anti-infective" value of vitamin A in colds and other infections, need further confirmation. The Council decided that the present evidence for the value of copper-iron therapy in the treatment of anemias is insufficient.—*(Jour. A. M. A.,* April 18, 1931, p. 1306).

LISTERINE AND OTHER MOUTH WASHES.—By its very name Listerine debases the fame of the great scientific investigator who first established the idea of antisepsis and whose work led to the principle of surgical sterilization and asepsis. The vast income of the Lambert Pharmacal Company from this preparation is testimony to but one thing—that modern advertising pays regardless of the actual merit of the product, regardless of any scientific demonstration of lack of efficiency, regardless indeed of possible harm that may result from unwarranted confidence in any unproved method for the prevention of disease. Even if Listerine and similar mouth washes were actually as antiseptic as their promoters infer, they would not accomplish what is claimed for them. The supreme ridiculousness of the situation becomes apparent when it is realized that the antiseptic virtues of Listerine are so infinitesimal in comparison with better antiseptics as to invalidate even modest claims made for it. What has been said of Listerine applies equally to a dozen or more "antiseptic" substances that have been brought into the market by other manufacturers. Amos and Andy seem to have made popular a tooth paste for which exaggerated claims have been made since its inception and whose composition has changed repeatedly since that time. Encouraged by this popularity, the manufacturers of Pepsodent have brought out Pepsodent Antiseptic. The advertising literature, the advertising claims, the composition and the method of promotion of Pepsodent Antiseptic resemble essentially similar material used in the promotion of Listerine. There are no data to indicate that Pepsodent Antiseptic is an efficient antiseptic. The public and the medical profession will do well to put their faith only in such antiseptic preparations as have been submitted to the Council on Pharmacy and Chemistry of the American Medical Association and accepted for inclusion in New and Nonofficial Remedies by that Council.—*(Jour. A. M. A.,* April 18, 1931, p. 1308).

PEPSODENT ANTISEPTIC.—According to the Pepsodent Company the composition of Pepsodent Antiseptic is as follows: Chlorthymol, 0.2 percent; benzoic acid, 0.2 percent; boric acid, 10 percent; citric acid, 0.1 perecnt; tartaric acid, 0.1 percent; flavor, 0.1471 percent; color, 0.008 percent; glycerin, 10 percent; alcohol, 25 percent; water, 54.2449 percent. The phenol coefficient is given at the ridiculously low figure 0.15.—*(Jour. A. M. A.,* April 18, 1931, p. 1332).

EKSIP.—For some years one Matthew Richartz, of New York City, has been swindling diabetics through the sale of a product called Eksip, advertised under the claim that it was unnecessary to diet if one would take Eksip. This product was dealt with in *The Journal,* April 1, 1922, at which time it was shown that Eksip consisted essentially of magnesium carbonate and starch. In February, 1931, a fraud order was issued against Matthew Richartz, Inc., and its officers and agents as such, and this swindle has been debarred from the United States mails. The analysis of Eksip made for the postal authorities by government chemists verified the analysis that had been made in the A. M. A. Chemical Laboratory four or five years previously—namely, that the stuff was, essentially, magnesium carbonate, talc and starch. The memorandum of the solicitor for the Post Office Department brought out that Eksip consists of some utterly worthless and innocuous tablets sold as a cure for one of the most serious diseases known to medical science—diabetes—and under the claim that those purchasing them do not need to diet, but, in effect, can eat anything they want, and that they were the "discovery" of a noted European specialist, who in fact never existed.—*(Jour. A. M. A.,* April 25, 1931, p. 1425).

MEDICAL ECONOMICS AND MEDICAL BUSINESS.—For some time physicians have been receiving regularly and complimentary a publication known as *Medical Economics: the Business Magazine of the Medical Profession.* The contents of this periodical are devoted largely to the problem of making money out of medical practice. It is apparently little if at all concerned with medical ethics or medical ideals. The vast majority of its space is devoted to the advertisements of products of many manufacturers whose preparations could not possibly be passed by the Council on Pharmacy and Chemistry. Even those manufacturers who cooperate largely with the Council find in this alleged medical publication an outlet for the announcements of their products that the Council will not accept.—*(Jour. A. M. A.,* April 25, 1931, p. 1404).

ABSTRACTS

ACUTE APPENDICITIS

In an endeavor to find the cause of the marked increase in the mortality of acute appendicitis, which amounted to 22.3 percent in the United States and 18 percent in Philadelphia between the years 1913 and 1923, John O. Bower, Philadelphia (*Journal A. M. A.*, May 2, 1931), made a survey of the hospitals of the city to determine the cause of this increase. The clinical records of 5,121 patients in twenty-seven hospitals were studied. In the twenty-seven hospitals surveyed, 364 surgeons were operating, an average of thirteen to a hospital. A certain number had no mortality. In one hospital the mortality rate was 11.2 percent; several surgeons in this group had no mortality. One had a mortality of 20 percent and another 3.3 percent. The mortality from appendicitis decreases with the experience of the surgeon. This is uniformly true in the management of the abnormally situated appendix and in that all important factor in the mortality of acute appendicitis, general peritonitis. In no disorder of the human body does surgical judgment influence the outcome so frequently or so markedly as in general peritonitis. There is a common belief that there is no mortality in appendicitis if operations are performed early, but this survey shows that 1 patient in every 39 dies even if operation is performed within twenty-four hours; if within forty-eight hours, 1 in 17 dies; seventy-two hours, 1 in 13; over seventy-two hours, 1 in 9. The average time that elapsed between the onset of symptoms and the operation of those who lived of the 5,121 patients was 60.1 hours; of those who died, 97.7 hours. A patient in good physical condition in 99 instances out of 100 is safe if operated on within the first twelve hours. In this series, gangrene of the appendix, with general peritonitis, had taken place as early as six hours from the onset of pain. Without exception, patients developing perforation with fulminating peritonitis before twelve hours have been given laxatives. Of the 5,121 patients, 306 died. The cause of death in 224, or 73.2 percent, was general peritonitis. Of the 306 deaths there were only 160 patients in whom a history regarding laxatives was obtained; 131 of the 160 had a general peritonitis; 124, or 98.4 percent, of the 131 had had a laxative. It would be presuming too much to say that laxatives caused the death of all these patients, but delay and laxatives were the cause of the majority of them. Localization of the infection either in the appendix or directly outside, resulting in a local peritonitis, takes place when the intestines are quiet—increased peristalsis, increased intra-appendical tension, perforation, general peritonitis, overwhelming intoxication and death follow the administration of laxatives. These records show that if a patient who has a fulminating appendicitis is given a laxative and develops a general peritonitis, he has but one chance in seven of recovering. With regard to the diagnosis of appendicitis the author states that only one symptom is always present—pain. Only one sign is uniformly present—tenderness (absent in 11 percent). There is only one corroborative test—the leukocyte count (absent in 20 percent).

SO-CALLED MEDICAL COMPLICATIONS OF PREGNANCY

Phil A. Daly and Solomon Strouse, Chicago (*Journal A. M. A.*, May 16, 1931), state that formerly, when the emphasis was placed on the obstetric point of view, there developed a paradoxical philosophy of therapy. A case of organic heart disease or of diabetes mellitus in which a surgical condition affecting the kidney developed remained primarily a medical case with surgical complications. But a woman with organic heart disease who became pregnant immediately was treated as a case of pregnancy with medical complications. This position no longer is tenable; on the contrary, the medical side of the combination should become the paramount issue, the pregnancy the complication. In their paper they maintain this thesis, using heart disease, disturbances of the thyroid gland and diabetes as illustrative examples to prove that the pregnant woman with so-called medical complications can be better studied, better diagnosed and better treated when the emphasis is placed on the medical aspect. For the purpose of more complete medical study, a ward in the Lying-In Hospital was obtained and outpatient clinics were established both in the hospital and in the dispensaries. In the outpatient work, every patient suspected of having the slightest aberration from the normal medical aspect was referred to the medical clinic. The obstetricians made no effort to determine whether a heart murmur was organic, nor would they make decisions regarding the significance of a glycosuria or a tachycardia. In the hospital the same principal was adopted—of referring to the medical clinic any abnormality. At no time was the obstetrician out of touch with the case, but the diagnostic and therapeutic controls were in the hands of the internist. It soon became apparent that under the new regimen better therapeutic results were obtained. And as the work went on it developed that certain of the clinical concepts concerning complications in pregnancy were based on erroneous ideas of both diagnosis and treatment.

INDISPENSABLE USES OF NARCOTICS: ABUSE OF NARCOTICS

Bernard Fantus, Chicago (*Journal A. M. A.*, May 16, 1931), defines narcotics as agents that lessen the relation of the central nervous system to external as well as internal conditions of the body. They act by freeing the mind more or less from the thraldom of the senses, and therein lies their value as well as their danger. It is the "ease and ignorance" with which one may be relieved of a great multiplicity of symptoms by means of narcotics that makes their use an ever present temptation to patient and physician alike; and it is only by patients foreswearing self-medication and by physicians adopting certain definite rules regarding their employment that the abuse of narcotics can be guarded against. Thus, narcotics should never be employed to remove a diagnostically indispensable symptom. True, as Cushing says, it should not be necessary to make "the diagnosis at the expense of exhausting pain". Nevertheless, the principle stated should stand as a declaration that, when symptoms are removed by a narcotic, the physician assumes the responsibility of supplying other guiding phenomena, such as temperature, pulse rate, leukocyte count and the observation of stools, to take the place of those obscured. It is the free and easy use of the morphine hypodermic to kill all kinds of pain and then forget about the case that cannot be condemned too strongly. The danger is that the giving of narcotics may lead to neglect of the really important treatment. It must be admitted that, next to the giving of cathartics, there is nothing else that has led to so many deaths from acute appendicitis as the giving of narcotics. Do away with the excruciating pain, which would have kept the patient from any notion that might in the least increase the tension in the appendix, and these very movements, now painlessly performed, may rupture the appendix and convert a simple appendicitis, from which no one should die, into a case of peritonitis, one of the most fatal of diseases. The fallacious improvement that a narcotic produces may lead to delay in operation and thus become a direct cause in the higher mortality of the late as compared with the early operation for appendicitis, strangulated hernia or intussusception. Less obvious, though no less certain, is the fact that the popular use of the so-called fever narcotics and of stupefying agents, such as liquor, to enable one to keep up and go about when one has a febrile cold and should be in bed, leads to all sorts of complications, from sinus disease to pneumonia, from rheumatism to nephritis. People must be made to realize that, when micro-organ-

isms of disease have invaded the body to the extent of producing fever, a struggle for supremacy is on: the fittest will survive, either man or microbe. Fever is equivalent to a general mobilization of available military forces in an invaded country. Suppress the fever and its symptoms, cancel the call to mobilization in the face of such invasion, and the enemy invades triumphantly and disastrously. Nothing is easier than to remove the results of fatigue—headache, backache, nervous irritability, insomnia—by narcotics; nothing is worse, unless the fatigue is due merely to temporary overexertion. When the excessive strain is habitual and the demand for the relief of its ill effects also becomes habitual and is gratified, one is driving head-on to a serious wreck. A rest treatment is needed, not dope. A useful reaction of the body to disease must never be abolished by narcotics. Thus, cough is in most instances an important means of effecting drainage from the bronchial tree. Stop the cough and the micro-organism-laden discharge, instead of being expectorated and thereby rendered harmless, stagnates and becomes more and more poisonous and damaging to the bronchial wall. The result is that a bronchitis that might have healed in a few days under more physiologic treatment may require weeks and months. Indeed, the lumen of bronchioles may become stopped up with secretion—and this is more likely to happen in the tiny bronchioles of small children—the tributary lung lobules undergo atelectasis from absorption of the air within, and this may be followed by extension of the inflammation into them; thus a case of bronchitis may be converted into broncho-pneumonia. Diarrhea is another symptom that must generally not be suppressed by opiates. The diarrheal discharges from the bowel carry away quantities of material that become highly toxic when retained, not only to the system at large but also to the bowel wall itself; thus a simple diarrhea may become converted into a catarrhal or even an ulcerative enterocolitis; and, instead of days, it may take the patient weeks and months to get well. Formation of habit should be the ever-present specter to inspire fear of prescribing narcotics in chronic or recurring ailments, unless there are malignant conditions or limited tenure of life to make the habit relatively unobjectionable. Especially should physicians, dentists, nurses and pharmacists make it their inviolable rule never to prescribe narcotics for themselves: for from among these classes is recruited a large contingent of those who become afflicted with the habitual use of narcotics. Some narcotics, as opiates and alcohol, are intrinsically habit producing. They operate in creating the notorious craving, partly by being most efficient antagonists to the disagreeable after-effects produced by the agent itself, and partly by causing mental deterioration. But all narcotics are liable to be habit forming, by reason of their very efficiency in relieving symptoms and their inability to cure any disease. Therefore, as soon as the effect of the agent wears off, the original condition asserts itself, demanding relief. Whenever, therefore, a narcotic is employed, it should merely be as an adjunct to the real curative treatment. It is only when cure is impossible that the narcotic habit may be a lesser evil than unrelieved suffering. In any case, an extensive range of knowledge of the many available narcotics should permit a choice of the least objectionable and yet most efficient agent for the particular patient to be relieved; and opiates should be appealed to only as a means of last resort.

INCOME FROM MEDICAL PRACTICE

From the study of 6,328 random reports of physicians from all parts of the United States, R. G. Leland, Chicago (*Journal A. M. A.*, May 16, 1931), makes the following observations: The median gross incomes for the entire group reporting lies in the range $6,500-$7,499. It appears that the largest annual gross incomes are being made by physicians who have had ten or more years of preparation. The low gross incomes fall among those physicians who have had three years or less of preparation. The peak of gross income seems to be reached somewhere in the period of fifteen to nineteen years in practice. The gross annual income for the period of five to nine years in practice and the long period of thirty-five to forty-nine years in practice appear to be closely parallel. Although the high average annual incomes for the entire group appears to be reached in the metropolitan areas of 1,000,000 and more population, the low gross averages fall in communities of 2,500 and less population. Orthopedic surgery, although furnishing only thirty-six reports, seems to be the most lucrative type of special practice for those physicians reporting gross incomes of $30,500 and less. For the entire group, the highest average annual gross income shifts to surgery. The lowest average for both groups is found in public health. Physicians in public health are principally on a salary basis and therefore the low position which they occupy in the income list is, in a measure, due to the fact that the list involves the comparison of gross incomes for many other physicians with principally net incomes for those in public health. The largest number of salaried physicians among those reporting for this study have had seven years or more of preparation. In the 6,328 reports studied, the percentage of physicians who derive all or most of their income from salary is largest in the population groups 10,000-25,000 and 500,000-1,000,000. Both the median and the average income of physicians whose income is derived wholly or for the most part from salary is found in the interval $4,500-$5,499 less than 4 percent of the 853 physicians in the salary or primarily net income classification received more than $12,500 in 1928. About 25 percent reported income more than $6,500; about 25 percent reported income less than $3,500. An estimated average net income of $5,250 for general practice is based on the average gross income of $7,781 derived in this study.

TYPHOID IN LARGE CITIES OF UNITED STATES IN 1930

This report concerns ninety-three cities of more than 100,000 population. This is an increase of twenty-five cities over the 1920 enumeration and a population increase of more than 8,500,000. Whereas in 1920 there were in the sixty-eight cities of more than 100,000 a total population of 27,735,000 persons, comprising 26 percent of the population of the continental United States, in 1930 in the ninety-three cities of this size there were 36,326,000 persons, about 30 percent of the total population of the country. The total typhoid mortality rate in 1930 in the seventy-eight cities for which records are available beginning with 1910 was almost exactly the same (1.61) as that for 1929 (1.59). Similar halts in the steady typhoid diminution have been noticed three other times in the past twenty years: in 1913, 1921 and 1925. After each pause the downward progress was resumed. There is no reason to suppose that typhoid reduction in the large cities of the United States has been permanently checked.

PREVENTION OF RICKETS IN PREMATURE INFANTS BY USE OF VIOSTEROL 100 D

Earl W. May, Detroit (*Journal A. M. A.*, April 25, 1931), believes that nearly every new-born infant probably is endowed with the amount of calcium and phosphorus in its body necessary to maintain a satisfactory balance until such time as adequate amounts of these elements are received through its mother's milk. This is especially true of the full term infant. Also, the artificially fed baby may do well for many weeks without requiring an extra supply of vitamin D to keep up a normal calcium and phosphorus balance. On the other hand, the premature infant may be more susceptible to the development of a negative calcium-phosphorus balance

on account of difficulty in ingesting enough milk, even by gavage, during the first few weeks of life. Cod liver oil in doses sufficient to prevent rickets in premature infants is not well tolerated because of its large content of fat. Viosterol, however, has supplied a medicament containing vitamin D without an appreciable amount of fat and with a potency adjusted so that one drop is equivalent to the amount of vitamin D in from one to two teaspoonfuls of standardized cod liver oil. One is enabled, therefore, to give these premature infants effective doses of vitamin D without upsetting digestion, and thus prevent rickets from developing. Moreover, the physical well being of the premature infant is greatly improved as observed clinically. There is a definite increase in the weight as compared with untreated infants; also, there is an increased appetite, greater resistance to infection and, finally, the percentage of deaths of premature infants is reduced when an adequate daily dose of viosterol is started within twenty-four hours after birth. The dose of viosterol should be from 45 to 60 drops daily after the first ten days. This dose should be continued for eight or ten weeks, after which period it may be gradually reduced to 20 or 30 drops daily.

COMBINED USE OF DIGITALIS BODIES AND EPHEDRINE HYDROCHLORIDE: EFFECT ON UNANESTHETIZED DOG

Carl A. Johnson and N. C. Gilbert, Chicago (*Journal A. M. A.*, May 16, 1931), describe experiments that they performed on unanesthetized dogs to determine whether the combined effect of digitalis bodies with ephedrine has any untoward effects. On the basis of the results obtained and from certain clinical observations, they conclude that undesirable or even dangerous effects are liable to occur. When digitalis is being used in the treatment of cardiac conditions, ephedrine should not be used or else should be used with extreme caution.

INNOCENT GLYCOSURIA

Harry C. Powelson, Rochester, Minnesota, and Russell M. Wilder, Chicago (*Journal A. M. A.*, May 9, 1931), present the results of a study of ninety-one cases in which benign glycosuria was diagnosed on the basis of the response to the simple oral dextrose tolerance test. The patient reported for the test after a fast of from twelve to sixteen hours, having received adequate carbohydrate previously. One hundred grams of dextrose was given by mouth, with 500 cc. of water. Samples of urine and venous blood were taken before, and one-half hour, two hours and three hours after the dextrose was given. The determinations of blood sugar were made with the technic of Folin and Wu. The urine was tested with qualitative Benedict's solution. It was found that benign glycosuria presents no definite symptoms, and many cases probably escape detection. Normoglycemic glycosuria is by no means uncommon. Patients with benign glycosuria lose weight and strength when placed on treatment for diabetes. They gain in weight and strength when dietary restrictions are removed. They may be made very uncomfortable by treatment with insulin. On the other hand, true diabetes mellitus should be recognized early and treated appropriately in order to suspend its normal tendency to progression. The simple dextrose tolerance test described is a reliable procedure for differentiating normoglycerine glycosuria from early or mild diabetes mellitus. Of eighty-two cases diagnosed normoglycemic glycosuria by this test, diabetes mellitus did not develop in any in the intervals of one to twelve years that elapsed after the tests were made. The familial character of normoglycemic glycosuria is illustrated by a family in which the mother and four of six children were shown to have the disorder. Cases of alimentary hyperglycemia and cases of "diabetes innocens" should be treated as diabetes mellitus until they have been proved innocent by long observation. Cases of glycosuria of pregnancy are usually instances of normoglycemic glycosuria, but of glycosuria in these is not certainly favorable. Cases of glycosuria accompanying furunculosis and other sapremic conditions may be innocent but their benign character is doubtful until it is proved to be so by later tolerance tests. True diabetes mellitus may be accompanied by a low renal threshold, which adds considerably to the difficulties of treatment.

PATHOLOGY OF SICKLE-CELL ANEMIA

Wallace M. Yater and Mario Mollari, Washington, D. C. (*Journal A. M. A.*, May 16, 1931), give the clinical history and postmortem observations in a case of sickle-cell anemia in which the patient died during an "abdominal crisis" apparently as the result of an arterial thrombosis of the liver. They state that the pathologic changes of sickle-cell anemia are distinctive, particularly as regards the spleen. The spleen becomes markedly atrophic, the pulp diminishes, the malpighian bodies disappear and calcium and iron incrustations are prominent. The liver and kidneys contain iron incrustations, and the kidneys also have calcium deposits in their tubules. The bone marrow is hyperplastic. The spleen plays more than a minor role in the disease; more splenectomies should be performed as early as possible in an effort to produce at least a symptomatic cure.

INTERVERTEBRAL DISK

Emil S. Geist, Minneapolis (*Journal A. M. A.*, May 16, 1931), demonstrates in the light of Schmorl's work, the anatomy, physiology and pathology of the intervertebral disk and calls attention to clinical deductions drawn therefrom in the recent literature as well as from clinical experience. He believes that this is of importance to the orthopedic surgeon, the compensation adjuster and the roentgenologist. He discusses pathologic conditions of the disk itself, pathologic conditions of the spine in which the disk plays the pre-eminent part, and the pathologic conditions of the spine in which the pathologic changes of the disk are of secondary nature.

INDISPENSABLE USES OF NARCOTICS IN TREATMENT OF COUGHING

Robert A. Hatcher, New York (*Journal A. M. A.*, April 25, 1931), emphasizes that the exact dose of morphine necessary for the relief of coughing cannot be stated in milligrams or fractions of a grain because severe irritation of the respiratory tract gives rise to strong stimuli, and the stronger the stimuli, the greater is the depression of the center necessary to abolish the reflex that such stimuli would induce. Furthermore, the frequency of coughing must be taken into consideration and the degree to which it is necessary to lessen it. One must also consider the probable state of the center on which the drug is expected to act. When there is widespread central depression the respiratory center is more easily depressed to the danger point than under normal conditions, and in such cases morphine must be used cautiously. Obviously, if demulcents are used to lessen local irritation in the respiratory passages, less depression of the center is necessary than when excessive irritation cannot be treated locally. When it is necessary to depress the cough center, one should invariably use the smallest dose that will serve the purpose and should not employ it more frequently than is necessary to maintain the required degree of control of coughing. The effects of morphine last some hours, and too frequent repetition of the dosage will result in cumulation with unnecessary depression of the respiratory center. The dose of morphine necessary for the relief of coughing, therefore, varies widely, and in some cases as little as 1/30 grain

(2 mg.) will suffice to lessen coughing, especially if that dose be repeated at intervals of from four to six hours. One should never direct that the single effective dose of morphine for a cough be repeated at stated intervals without regard for the varying needs of the patient from hour to hour and from day to day, and the dose should always be reduced to the least amount that alleviation of the symptoms permits. A thorough consideration of the causes of coughing and its rational treatment will convince one, however, that morphine itself has only a limited field of usefulness in the treatment of coughing in the great majority of cases, and that the far safer codeine may be used with advantage in most cases in which simple measures do not cause relief.

NERVOUS SYMPTOMS AS EARLIEST MANIFESTATIONS OF CARCINOMA OF PANCREAS

Joseph C. Yaskin, Philadelphia *(Journal A. M. A.*, May 16, 1931), observed depression with crying spells, anxiety, insomnia, anorexia, loss of weight and weakness without feeling of unreality and other disturbances of perception, memory and judgment in four instances of carcinoma of the pancreas in previously healthy persons. These symptoms antedated any definite gastro-intestinal symptoms and objective observations by from three to eight months. No explanation is offered for the occurrence of these phenomena. The relation between visceral changes and abnormal emotional states is referred to.

FUNCTIONAL ALBUMINURIA

In order to recognize any important factors associated with functional albuminuria and in order to study the subsequent course of these patients, 174 cases showing albuminuria on routine examinations were selected by Robert Sterling Palmer, Boston *(Journal A. M. A.*, May 9, 1931), for study and follow-up. None of these subjects showed any other abnormality on physical examination or on urine examination. The blood pressures were normal, in no instance being over 140 systolic. Examination of sediments was not done as a routine in these cases. The object was to select those cases which usually are classified as functional, intermittent, postural or othostatic albuminuria. One hundred and sixty-four of these patients were examined for the first time ten or more years ago; ten were examined nine years ago. This series has been compared with 147 normal subjects examined at approximately the same times ten or more years ago. The average age of the normal series at the time of examination was 18.4 years, of the albuminuria patients, 18.0 years. That infectious disease played no part in the production of albuminuria in this series was shown by the fact that the occurrence of infectious diseases and of constipation was not significantly different from that in the control series or in a larger normal series previously studied. On the basis of his observations the author concludes that slight traces of albuminuria in young male adults without other signs of renal disease is of comparatively little significance, persisting in only one of thirty-five cases followed after eight years and having occurred transiently in one other, there being no symptoms of renal disease in any case. Factors associated with functional albuminuria are underweight and a positive family history of vascular disease. Poor posture was not found significant in this series. The pathogenesis of functional albuminuria is not clear but is probably local and may be the result of stasis producing a local acidosis. No treatment of the condition is indicated. Individuals exhibiting this sign should not be excluded from normal physical exercise.

IRON AND COPPER IN TREATMENT OF ANEMIA IN CHILDREN

As there is still some controversy in the literature as to the effects of iron in the treatment of anemia in children, it occurred to Milton Smith Lewis, Nashville, Tennessee *(Journal A. M. A.*, April 4, 1931), that it was of considerable importance to determine whether the effect of iron could be enhanced by the addition of copper, and it was felt that a study of the therapeutic action of these two elements may help to demonstrate their value or lack of value as possible therapeutic agents in the treatment of anemia in children. It was found that iron and copper given in combination to thirty-four children with nutritional and secondary anemia was more effective than iron given alone. This was particularly noticeable in the nutritional series.

TREATMENT OF TRICHOMONAS VAGINALIS VAGINITIS

J. P. Greenhill, Chicago *(Journal A. M. A.*, May 30, 1931), states that *Trichomonas vaginalis vaginitis* is a fairly common condition among pregnant and nonpregnant women. Its chief symptom is a profuse vaginal discharge, which in about half the cases is associated with a burning or itching sensation in the vagina and on the vulva. Frequently the discharge has a very disagreeable odor. The vaginal mucosa is usually orange-red and roughened; in the vagina a profuse, greenish yellow, foamy, purulent discharge is found. The simplest way to study and to identify the trichomonas organisms is by means of fresh hanging drops or drops diluted with salt solution. In the fresh hanging drop the organisms are easy to detect because they are in constant motion. The treatment that the author is using at present consists of scrubbing the vulva and vagina with tincture of green soap, washing out the latter with mercuric chloride or tap water, applying hexylresorcinol to all parts of the vagina and vulva, and inserting tampons saturated with glycerin into the vagina. This treatment is repeated every two days until two consecutive hanging drops fail to show the trichomonas. Since recurrences are frequent, especially after a menstrual period, patients should be reexamined immediately before and just after the menstrual period, following the course of treatment. If trichomonas organisms are found, the treatment should be repeated.

OBSERVATIONS ON EFFICIENCY OF COMMONLY USED HYPNOTICS

G. P. Grabfield, Boston *(Journal A. M. A.*, May 30, 1931), describes the observations he made in a comparison of the efficiency of commonly used hypnotic drugs. It occurred to him that a rough index of efficiency might be obtained by prescribing half the amount of the recommended doses and noting the number of doses that were required to produce a comfortable night's sleep. In this way the number of patients used, divided by the number of doses required, would give a rough index of efficiency. If the accepted dose, under such circumstances, was the correct one the indexes should run about 50 percent. In deciding on the dose either half the pharmacopeial dose or half the dosage recommended by the manufacturer, in the case of a proprietary drug, was used. While the indexes were much higher, this method proved satisfactory. Two series of experiments were done, in the first of which a senior house officer was asked to prescribe the drug by name, and in the second one of which he was given the drug in a numbered bottle to be dispensed in the ward according to a given dosage. The drugs selected are either in the U. S. Pharmacopeia or in the accepted list of New and Nonofficial Remedies. In only one case did the newer drug show any great advantage over the older ones of the same chemical group, and that was in the case of sabromin, which has certain chemical features that differentiate it from other bromide hypnotics, but the slightly increased efficiency does not compensate for the greatly increased cost. From his observations the author concludes that chloral hydrate in small doses and barbital are the most effective and cheapest nonalkaloidal hypnotics available today. He also emphasized the fact that satisfactory results are obtained with much smaller doses than are customarily used.

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ORIGINAL ARTICLES

BRONCHOSCOPY IN THE DIAGNOSIS AND TREATMENT OF PULMONARY DISEASE*

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When discussing bronchoscopy it has been customary for the medical profession to think of foreign bodies in the air passages and to conclude that a presentation on this subject would be of didactic interest only. Recent statistics of the Bronchoscopic Clinics show that the endoscopic procedures performed for foreign body constitute less than two percent of the total number of examinations in spite of the fact that foreign body cases are twice as common as they were ten years ago.

The greatest field of usefulness for bronchoscopy today is the diagnosis of obscure pulmonary disease and the treatment of certain well-defined conditions. Bronchoscopy, however, is the only method to be considered in the removal of foreign bodies in the air passages.

Among diagnostic problems probably no one condition presents greater difficulties in arriving at an accurate diagnosis than "bronchial obstruction". It is often easy to make a diagnosis of bronchial obstruction by physical examination and Roentgen studies. The cause of the obstruction must be determined, however, before appropriate treatment can be instituted. When one recalls that obstruction may be produced by congenital anomalies, foreign bodies, new growths, either benign or malignant, endogenous foreign bodies as broncholiths, inspissated or thick secretion, tuberculosis and strictures, as well as a number of extra-bronchial conditions, the need for an etiologic diagnosis is apparent.

In discussing this problem, brief reference shall be made to certain relatively common diseases that should be considered in arriving at a diagnosis, particularly if the signs be obscure.

Foreign Bodies in the Bronchi. No presentation of bronchial obstruction is complete without considering the possibility of foreign body. That foreign bodies in the bronchus are of rare occurrence is not supported by the evidence at the Bronchoscopic Clinics; we have observed a large number of cases of bronchial obstruction with or without suppuration of the lungs that were the result of overlooked foreign bodies not only in the air passages but occasionally in the food passages. Among the causes of non-recognition of foreign bodies are: failure to elicit a definite foreign body history or to attach proper significance to the history; neglect either to have roentgen ray studies or to have proper examinations made, and failure to have a diagnostic bronchoscopy performed in cases of obscure and unexplained chest findings.

Neoplasm of the Bronchus. Obstruction to drainage of a bronchus by the presence of new growth, either benign or malignant, may simulate lung suppuration. The following case is illustrative: A boy, aged eleven years, was sent to the Clinic because of cough with expectoration, of one year's duration. Physical examination and roentgen ray study revealed definite involvement of the right lower lobe; the cause of this was not apparent. There was a history of pneumonia, and it was believed that there was some bronchiectasis present. Bronchoscopy was advised. There was found a rounded, globular mass of tissue apparently of inflammatory origin which practically completely occluded the right lower lobe bronchus; this was removed through the bronchoscope, and submitted to the laboratory for examination. The histologic diagnosis was polyp of the bronchus. Following the removal of the tumor the physical signs rapidly cleared and the patient has had no recurrence of symptoms. Obviously, without bronchoscopy in this case medical treatment would have been futile and ultimately there would have been marked tissue changes, the result of interference with drainage from the lower lobe bronchus.

A large number of cases of cancer of the bronchus, in most instances of primary origin, have been observed at the Clinic. Often the clinical picture was that of lung abscess or bronchiectasis; occasionally hemoptysis was the outstanding symptom. In those cases where the growth involved the larger bronchi it was possible to remove a specimen of tissue for histologic examination. Occasionally it was not deemed advisable to remove a specimen for biopsy; the bronchoscopic

*Presented before the Terre Haute Academy of Medicine, March 6, 1931.

findings were suggestive of infiltration of the bronchial wall because of fixity and rigidity of the bronchus and were sufficiently significant to warrant a diagnosis of malignancy, and the carrying out of deep roentgen ray therapy.

Pulmonary Tuberculosis. As a general proposition bronchoscopy is not indicated in pulmonary tuberculosis. Occasionally a case where tuberculosis may be suspected but cannot be verified, the diagnosis can be cleared up by bronchoscopy. In a number of instances patients have been sent to the Clinic with a provisional diagnosis of pulmonary tuberculosis. Repeated sputum examinations would be negative for tubercle bacilli yet a specimen of secretion bronchoscopically removed would contain tubercle bacilli; in that way we were able to aid in corroborating the provisional diagnosis.

A number of cases of bronchial obstruction occurring in young children have recently been sent to the Clinic for diagnosis. In several of these a diagnosis of tuberculous peribronchial lymphadenitis was made and in two instances caseous and necrotic material was aspirated bronchoscopically through the bronchial wall.

Asthma. Although asthma cannot be considered properly as being due to bronchial obstruction, there frequently is present, not only cough and wheezing, but also expectoration of mucopurulent material; often patients present themselves with symptoms of asthma and ultimately a diagnosis of bronchiectasis is made. To quote Chevalier Jackson, "All is not asthma that wheezes". Often wheezing respiration is associated with bronchial stenosis with suppuration distal to the point of stenosis. Unless one is able to see the interior of the tracheobronchial tree and observe the stenosis one cannot intelligently determine the cause of the "asthma", nor can proper treatment be given. Bronchoscopy has its greatest field of usefulness in the so-called "bacterial" form of asthma.

Post-operative Pulmonary Atelectasis. Although this condition should not be confused with a suppurative lesion, from a bronchoscopic standpoint there is a certain similarity in that the atelectasis results from obstruction of a bronchus by secretion, which, when removed bronchoscopically, or by other means, affords immediate and often complete relief. In this connection it is imperative to emphasize the need of careful physical examination of the chest in cases of post-operative lung complications. Too often a diagnosis of post-operative pneumonia is made after a very superficial examination. Certainly the incidence of post-operative pneumonia has not been so great since our attention has been directed to the frequency of collapse of the lung as a post-operative complication. If the conservative forms of treatment are not successful in relieving the obstruction, bronchoscopy should be done.

The diagnosis of abscess of the lung is usually unassociated with difficulty; occasionally a bronchoscopic examination may be necessary, particularly if there is a question of bronchiectasis. Pulmonary abscess may be secondary to a bronchial foreign body, carcinoma or stricture of a bronchus. In these cases a diagnostic bronchoscopy is necessary before a plan of treatment should be formulated.

Pneumonography. In recent years great progress has been made in the diagnosis of chest conditions by the bronchoscopic introduction into the air passages of inert substances which are radiopaque. With these it is possible for the roentgenologist to outline the tracheobronchial tree. In this way he can accurately localize foreign bodies in the bronchi or extra bronchial shadows which may simulate foreign bodies, and abscess cavities may be localized with relation to the tracheobronchial tree as well as to the chest wall so as to aid the surgeon in external drainage. One of the most important aids to the thoracic surgeon in recent years is the assistance given by the bronchoscopist by diagnostic bronchoscopy and lung mapping carried out under bronchoscopic guidance. It is possible to accurately determine whether bronchiectasis is unilateral or bilateral, whether it is monolobar or multilobar. From the surgeon's standpoint this information is absolutely imperative.

Pulmonary Abscess. With prompt and adequate spontaneous drainage of an abscess of the lung recovery promptly follows. In the cases where drainage is not adequate the process does not clear up spontaneously and it is in this group of cases that bronchoscopy is of value as an aid in treatment. All forms of treatment of suppuration are dependent on securing and maintaining adequate drainage. It has been demonstrated over and over again that drainage can be improved through the natural passages by bronchoscopy. Many cases of lung abscess have been referred to the Bronchoscopic Clinic, usually after having been under medical treatment for a variable period of time. In every instance, almost without exception, a diagnostic bronchoscopy is performed to obtain certain information concerning the interior of the bronchial tree. The patient is studied by the internist, the roentgenologist, the surgeon and the bronchoscopist and the proper form of treatment is determined on the basis of their findings. In a large proportion of cases bronchoscopy is recommended; in a certain group surgery is definitely indicated.

Certain interesting clinical observations have been made on a group of cases of lung abscess that have been under observation and treatment at the Clinic. It was found that a majority of the cases of abscess occurred between the ages of twenty and forty years. This is noticeably true in the cases of abscess of the lung which followed tonsillectomy. The location of the abscess with relation to the lobes of the lung is also of interest. Formerly it was believed that abscesses, like foreign bodies, were most commonly found in the lower lobes, notably on the right. We have found that in over one-half of the cases treated at the

Clinic the abscesses were in the upper lobes.

In those cases selected for bronchoscopic aspiration the treatments are carried out once or twice weekly as indicated in the individual case. This consists of aspiration of the pus through the bronchoscope by means of independent aspirating tubes, followed by the instillation of some medicament. In conjunction with this there is carried out the usual medical treatment that is indicated in these cases. Fever is not a contraindication to bronchoscopy unless it be due to an acute pneumonitis with diffuse lung involvement. Very often fever indicates impaired drainage and when this is improved by bronchoscopy the temperature very promptly returns to normal.

It is important to remember that bronchoscopy in the treatment of suppuration of the lung is merely an aid and does not supplant any of the other forms of treatment that may be indicated.

Bronchiectasis. The problems of bronchiectasis are often most complex both from the standpoint of diagnosis and treatment. Long-standing bronchial obstruction will invariably be followed by bronchiectasis. Often bronchoscopic removal of the obstruction will be followed by complete recovery. It is important to know whether the bronchiectasis is unilateral or bilateral. Lung mapping is absolutely indispensable for this and should be combined with bronchoscopy.

Considerable very interesting work is being done in connection with Children's Clinics in investigating cases of patients with cough of long standing. It has been repeatedly found that many of these little patients have disease of the nasal accessory sinuses with a tracheobronchitis or early bronchiectasis. The ultimate outcome of nasal and bronchoscopic treatment cannot be determined at this time; it seems reasonable to assume that more can be done with early cases than can be accomplished in adult patients with a well-developed bronchiectasis.

In closing, let me emphasize that bronchoscopy is still the only method to be considered in the treatment of bronchial foreign bodies. The foreign body phase of the work has been overshadowed by the immense number of cases that are constantly being sent to the Clinics for the diagnosis of obscure chest disease or for the treatment of known conditions which respond favorably to bronchoscopy. Bronchoscopy is to the internist and thoracic surgeon what cystoscopy is to the urologist and ophthalmoscopy to the ophthalmologist. It has done much to discourage inferential methods of diagnosis in pulmonary disease. It is one of the aids to diagnosis and treatment of chest conditions that should be available in every general hospital.

PSEUDO MUCINOUS PERITONITIS*

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In choosing this subject for a discussion in an article which deals primarily with extension into the peritoneum of the contents of peculiar ovarian cysts after rupture, we are not unmindful of the fact that cases are reported of similar conditions having arisen after rupture of the so-called mucocele of the appendix. These cases are rare and the literature on this subject is scanty. During twenty-five years of abdominal surgery I have seen only one case of genuine mucocele of the appendix. This occurred in a woman four months pregnant, presented the symptoms of an ordinary appendix in the relatively acute stage, was removed at operation without rupture and the patient made a good recovery. Its far more common source is the pseudo mucinous cyst of the ovary. The common cystadenoma of the ovary is so familiar to everyone that it is mentioned here simply as a matter of comparison. Its frequent uniocular character and its serous content are likewise well known. In short it is the common water tumor of the ovary. It is with that comparatively rare but dangerous class of ovarian cyst that we are interested.

These are classified by Kelley, Crossen and others as pseudo mucinous cysts. Under this classification we have (1) glandular, (2) papillary.

In speaking of the pseudo mucinous cyst, the glandular type is the one most often referred to, but according to most writers on this subject, the two may be combined.

The glandular type is characterized by large cavities lined with epithelial cells, while the papillary type shows a folding of the cyst wall with resulting increase in connective tissue and a tendency to proliferate and rupture early.

Quoting from Kelley, the multilocular condition of the true pseudo mucinous cyst is not so outspoken as there is usually but one large compartment, and it may take careful search to discover additional loculi. Pseudo mucinous cysts do not often attain the enormous size that may be attained by the serous cyst. A man's head is the average size, and the weight is from three to five pounds. In external appearance they resemble the serous cyst. The walls are usually very thin, a fact that adds to their danger to the patient. They are covered either with a greatly thinned out germinal epithelium, or by no cells at all. The walls are composed of connective tissue arranged in stratified layers poor in blood supply. Their characteristic anatomical feature is the lining of the cyst cavities. This consists of a single layer of high cylindrical epithelial cells, with small round basal nuceli with vacuoles in the mid or upper portion. The goblet cells present the appearance of large bowel epithelium.

*Read before the Marion County Medical Society, February, 1931.

The second characteristic of these cysts is a thick, tenacious, viscid, ropey fluid content. This is the pseudo mucin, and is the one truly distinguishing mark of this class of cysts. This content is found in some, though not in all papillary cysts, hence their inclusion in this discussion.

Pfannestel, studying the relation of pseudo mucin to ovarian cysts, concludes that it is a glycoproteid because it splits into a protein and sugar. It is soluble in water, but in small quantities can be detected only by chemical means.

Pseudo mucin is not found in normal ovaries, in dropsical graffian follicles nor in parovarian cysts.

He concludes that it is not a result of calloid cell degeneration, but is a real secretion of the epithelial cells, and continues indefinitely without cell destruction.

As to the etiology of this condition, the real source seems to be somewhat in doubt. McCarty, after exhaustive studies, concludes that these cysts develop by hyperplasia of the lining epithelium, from simple cysts or from the stratum germinativium of the ovary.



FIG. I. Cyst removed at operation after rupture (Crossen).

Goodall expresses the belief that pseudo mucinous cysts not only are ovulogenic in origin, but that they arise from the germinal epithelium, while Taylor in a recent article expresses the belief that they may be similar in origin to serous cysts.

Masson and Hamerick, in a recent number of *Surgery, Gynecology and Obstetrics*, review a series of thirty cases from The Mayo Clinic all of which were operated before rupture. The average age was 48.4 years.

Most often these are unilateral, although some are bilateral. At The Mayo Clinic fifty percent of the ruptured cases have been bilateral, while twenty-six percent of the unruptured cases were bilateral. There seems to be some tendency to development of the condition in the other ovary, although there may have been no evidence at time of operation. The papillary form is more likely to attack both ovaries than is the glandular type. There is some tendency toward malignancy, as in the 30 cases from The Mayo Clinic, 22 were benign while 8 were malignant. This tendency to become malignant increases with the rupture of the cyst, as there is 26.7 percent malignancy in the unruptured cases, as against 43.3 percent malignancy in the ruptured cases.

Symptomatically, these cases are in no wise different from the serous cyst until after rupture has occurred. There is a gradual enlargement of the abdomen, an increase in intra-abdominal pressure, a sensation of bearing down, urinary frequency and dysuria. There may or may not be irregularity in menstruation.

The onset of symptoms is gradual and the progress slow, and there is no way of differentiating from the ordinary cyst before operation, if rupture has not occurred. After the rupture, quite a different picture is presented. In the language of Kelley, after the rupture of a pseudo mucinous cyst and the escape of its contents into the abdominal cavity, an interestingly weird type of chronic peritonitis supervenes.

Pseudo myxomatous peritonitis is a diffuse invasion of the peritoneum by the mucinous and cellular elements of a ruptured pseudo mucinous

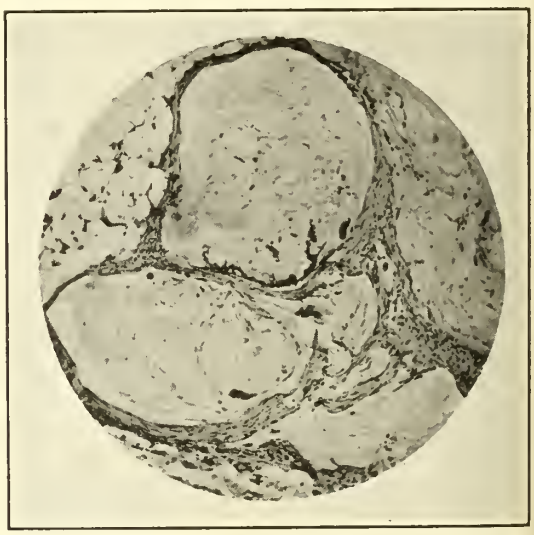


FIG. II. Author's case. Shows large cavities in section from omentum. Cavities filled with pseudo mucin. Thin walls, few blood vessels.

cyst of the ovary or appendix. Both conditions have been found in the same patient. The pseudo mucinous material is absorbed into the peritoneal lymphatics until they distend, become engorged and rupture. Round celled infiltration and growth of granulation tissue progress, while the goblet cells continue their secretory activity, and a widespread, massive, jelly-like peritonitis results. Adhesions form, viscera become encased, fistulous tracts may form and paresis of the intestines is a common and fatal issue. As to the mode of spread through the peritoneum, Mayo's refer to the process as one of implantation, rather than to diffusion through the lymphatics.

To me this appears to be more nearly the correct idea, since in the non-malignant type the process is confined to the peritoneal cavity and its contents. Also, a fatal issue may be brought about by pressure on organs outside abdomen, as lungs and heart, as shown by case which it was my good fortune to be able to follow to post-mortem.

This patient, Mrs. A., is white, age about thirty-six, married and the mother of four children. She was first visited at her home with her physician February 9, 1929. Her previous history was essentially negative. She had had no menstrual disorders, and felt well enough. There was no history of loss in weight. She gave only the history of a gradual enlargement of the abdomen over a period of several months, with some accompanying pressure symptoms. Her physician had made a tentative diagnosis of abdominal tumor. On examination, this tumor could be made out as an ovarian cyst of considerable size. There was in addition a general doughy feeling to the abdomen, with an occasional area which gave a distinctly lumpy feeling to the palpating hand. I explained to the attending physician that we were dealing with an ovarian cyst, and that I feared it was one of the kind that after rupture had its contents grafted onto the peritoneum.



FIG. III. Author's case. Postmortem photography.

Patient was admitted to the Indiana Christian Hospital February 11, 1929, and prepared for abdominal section. At time of her admission temperature, pulse and respiration were normal. Blood count showed 3,600,000 red cells and 8,200 white cells. Urine was cloudy. Alkaline specific gravity 1016 with a trace of albumin. No sugar, no bile, and a very few pus cells.

At the operation abdomen opened through midline, incision below umbilicus. An ovarian cyst the size of a man's head arising from the right ovary was exposed. This was distinctly multilocular and very thin walled. One of the loculi, probably the parent one, had ruptured and through an opening which would easily admit three fingers, there was a steady flow of a brownish gelatinous material. The tumor was adherent, but was isolated and removed without difficulty.

The lower part of the abdomen was pretty well filled with the same gelatinous material, and large quantities of it were removed by hand and by washing. The parietal peritoneum as well as the visceral layer of the peritoneum was studded with small cystic growths exuding the same gelatinous material. The omentum was retracted toward the upper part of the abdomen, and was very greatly thickened, having an average thickening of two inches, was hard and lumpy, and well smeared with material similar to that exuding from the cyst. A portion of the omentum was removed for sectioning.

A diagnosis of pseudo mucinous cyst of the ovary with peritoneal involvement was confirmed, and the abdomen closed without drainage. On section the ovarian tumor is found to consist of one large compartment and four smaller ones. The large compartment was the one ruptured, giving evidence of being oldest. The partitions between the loculi were reasonably thick and tough, but that portion exposed to the peritoneal cavity was very thin. Specimens from cyst were also sent to pathologist.

Postoperative stay in the hospital was uneventful, and patient left hospital February 25, 1929, with a wound healed by first intention.

The report of the pathologist, Doctor Funkhouser, is a pseudo mucinous cyst in both the ovary and omentum. Both areas were labeled benign, and no evidence of malignancy found.

In consideration of the wide-spread involvement of the peritoneal surfaces, I gave the family a grave prognosis.

After the patient's return home she was relieved of some of the pressure and seemed to improve. For some months she was quite comfortable, gained in weight and did her usual household duties. Later, of course, the abdomen began noticeably to enlarge again, and she became conscious of pressure symptoms. Some months after operation she consulted Doctor Voyles with a view to taking some x-ray treatments. I had declined to advise x-ray therapy earlier because of the extent of the process. In this belief Doctor Voyles concurred, and no x-ray treatments were given. Her condition progressed very slowly, but did continue to progress downward, and in the summer of 1930 she was forced to remain in bed because of pressure in abdomen, frequent urination, and shortness of breath. She died late in August, 1930, approximately eighteen months after her operation, and certainly a good two years after rupture of the cyst.

At autopsy two important facts were revealed: First, every available part of the peritoneal surface appeared to be involved in the process, and every part of the cavity filled with pseudo mucin. The abdominal surface of the diaphragm was completely covered and the diaphragm itself elevated to such a height that it seemed there was no space left for her lungs or heart. Pelvic organs likewise showed the results of pressure. There were no changes in the remaining ovary. Second, there were no signs of any involvement whatever in any organ outside the peritoneal cavity, a definite proof that this process in this case is benign, and that death is due to the pressure and the accompanying anemia and cachexia.

Conclusions:

1. These cysts are not so rare as we may be led to believe. Wilson found 144 pseudo mucinous cysts in 331 cases of ovarian tumor. Taylor puts their frequency at thirty percent of all ovarian cysts.

2. They may become malignant, and the tendency to malignancy is increased after rupture of the cyst. Unruptured cases 26.7 percent were malignant in Mayo's series of 30 cases. Papillary type more often malignant.

3. Either one or both ovaries may be involved.

4. If one ovary is involved, there appears to be a tendency for later involvement of the other ovary if left at operation.

5. The prognosis is good if cysts are removed before rupture. It is very grave after rupture has occurred, although there are cases of recovery on record.

6. There is no way to differentiate from ordinary ovarian cysts before operation.

7. Microscopically, the great majority of these cysts are benign, although clinically they are malignant.

8. Benign cases kill by pressure.

9. The finding of a cyst, however small, containing pseudo mucin at operation, calls for radical operation.

10. X-ray may do some good in some cases. All malignant cases should be treated by radiation.

TREATMENT OF GENERAL PARALYSIS*

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The treatment of general paralysis apparently is receiving more attention than the treatment of any other organic group of patients in mental hospitals. During the fiscal year there were admitted 284 patients, of whom 46, or 16 percent plus, as compared with 12.58 percent last year, were suffering from general paralysis. The diagnosis was established by the usual neurological and mental examinations, and was confirmed by laboratory examinations of blood and cerebrospinal fluid.

This report refers to thirty-five patients treated whose serological examinations have been repeated. Twenty-nine of these patients received malarial therapy before they were given anti-luetic therapy. The average number of chills was nine, and the average highest temperature was 105.5 degrees F. Two patients had been treated with malaria before admission. One patient, forty-eight years of age, after having had four chills, had a continuous temperature for several days which necessitated the termination of the infection. In two patients the infection terminated spontaneously after four and eight paroxysms, respectively. The symptoms of herpes labialis, jaundice, secondary anemia, myocarditis and loss of weight were present in several patients. The infection was terminated by quinine bisulphate, five grains three times daily for three days. After a period of two to three weeks they were given each week arsenicals intravenously and mercury salicylate grains three-fourths intramuscularly.

The combined treatment, *i. e.*, malaria and arsenicals and mercury, appears indicated for three reasons: namely, that the arsenicals are a systemic tonic, are anti-malarial and spirochetecidal. We believe that persistent treatment by this method is necessary, as proven especially in excited and maniacal patients after the malaria had been terminated. All patients reported had nine to forty weeks of anti-luetic treatment. Four patients died during the malaria period. These were of the deteriorating type whose average age was forty-nine years. One died one week following the termination of malaria by quinine, one after the first, one after the seventh, and one after the tenth paroxysm. Three other patients died, two,

*At the Logansport State Hospital for the year ending September 30, 1930.

eight, and nine months after treatment from paretic convulsions. In two untreated patients the cause of death of one was due to paretic convulsions and to exhaustion of the other. These were of the far advanced, deteriorating type of paresis.

Six patients received arsenicals, mercury and bismuth. Their average age was thirty-five years. However, they were not in condition to withstand malarial paroxysms. Three have shown slight improvement mentally and physically and are employed on the wards while the remaining three show a definite regression.

Not one of the patients included in this report is at this time serologically negative, regardless of the mental status. The mental status of patients under treatment does not necessarily follow serological improvement. On the other hand, the patient may become fairly clear mentally with no change in the serology. The cerebrospinal fluid Wassermann is four-plus in all but two patients, where it has changed to three-plus after twenty-four and twenty-nine weeks of anti-luetic treatment after malarial therapy. However, the colloidal gold curve was modified in all patients and is negative in three instances.

In the malarial group classified as "greatly improved" two have shown complete remission after four and a half and six months of treatment. They have been furloughed and have resumed their former occupations. Three have been furloughed and continue to adjust to outside environment. Two remain in the hospital awaiting disposition—one having been convicted for larceny and burglary—apparently while suffering from paresis. In this group not one is serologically negative but has shown improvement in the colloidal gold curve, globulin content and cell count of the cerebrospinal fluid. The nine patients classified as "improved" are in better physical and mental health than they were upon admission and are actively engaged in some hospital activity. They are making a satisfactory hospital adjustment. The six patients classified as "unimproved" show a definite regression in their psychosis and neurological symptoms.

Total Number Under Treatment			Malaria and Arsenicals		Arsenicals	
	No.	Percent			No.	Percent
Greatly Improved	7	20.00	7	24.2	0	0.0
Improved	12	34.3	9	31.0	3	50.0
Unimproved	9	25.7	6	20.7	3	50.0
Died	7	20.0	7	24.1	0	0.0
Total treated	35	100.0	29	100.0	6	100.0

In conclusion the results may be summarized as follows:

The thirty-five cases were of the advanced type, having been admitted to a state hospital. Six were treated with anti-luetic therapy alone. Twenty-nine received malaria and anti-luetic therapy, showing the greater improvement. The mental improvement does not necessarily indicate serological improvement.

BLOOD-STAIN OF THE CORNEA*

(CASE REPORT)

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This case is reported because of the rarity of blood-staining of the cornea in comparison to the frequency with which hemorrhage into the anterior chamber occurs, and also because several interesting problems have been discussed from time to time in connection with these cases.

Roemer[1] estimated that blood-staining of the cornea occurred once in about four hundred cases of severe eye injury, and at Morefield's it was observed in about the same proportion of cases (Fleck)[2].

A number of ophthalmological text-books make no mention of the subject. Fuchs[3], however, gives brief description of the phenomenon. He writes: "A peculiar sort of opacity and coloration (blood-staining) develops when the anterior chamber remains for some time filled with blood. The cornea, because it takes up the coloring matter of the blood, assumes intense reddish, brownish, or brownish-green color and at the same time becomes so opaque that the parts beneath can no longer be distingished through it. It gradually clears again, beginning at the edge, but only in rare cases does it become once more perfectly transparent, and then only after months or years have elapsed. In that stage in which the central brown portion is surrounded by a narrow marginal zone which has regained its transparency it looks as though a brown-colored, crystalline lens had prolapsed into the anterior chamber and was lying beneath the cornea (Vossius[4], Treacher Collins[5])". With the slit-lamp the staining appears to affect mainly the interlamellar spaces, in part also the lamellæ themselves and along with the diffuse staining granules and larger golden yellow particles may be seen (Koeppe).

The case here reported is quite typical of others recorded in the literature.

Case Report—C. T., a ten-year-old boy, was struck in the right eye with a whip on June 24, 1929. He was treated by his family physician until June 29th, when the pain became so severe that consultation was advised.

Examination showed vision of the right eye reduced to light perception, that of the left eye was 20/30-. The right upper lid showed a tendency to droop. The palpebral fissures were unequal. The conjunctiva was in fair condition, there being only slight ciliary injection. The cornea was clear. The anterior chamber was about three-fourths full of blood. The right pupil was apparently dilated, but only the upper margin could be seen. Tension was increased. There was no fundus reflex.

The diagnosis was hyphemia and increased intra-ocular tension (secondary).

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology, December, 1930.

Treatment consisted in rest, the application of heat, the use of a myotic, and dietary regulation.

Under this regimen the hemorrhage appeared to be absorbing and pain was relieved for about ten days, when the anterior chamber was again filled with blood, and the pain became excruciating. Two days later the entire cornea had a greenish-brown appearance. At that time a diagnosis of blood-staining of the cornea was made. The patient was relieved gradually of pain, and he accompanied his family on their annual vacation. He returned to the office on August 10th. At this time the cornea was almost clear. The fundus reflex was still absent.

Without going into detail with reference to the literature it is of interest to note that cases of blood-staining of the cornea were reported by John E. Weeks in 1893, by Treacher Collins, who reported nine cases, in 1896, by Wadsworth and Verhoeff in 1905, and during the same period by Baumgarten, Parsons and Vossius. Begle[6], in 1914, reviewed the literature and described three cases of blood-staining of the cornea observed at Elsching's eye clinic at the University of Prague. During the World War and the years immediately following, little seems to have been written on the subject. B. Bichelonne[7] (1926) describes a case which occurred in a soldier who received a blow in the eye from a piece of wood falling into the trench where he was standing. When examined at the end of forty-eight hours he had an effusion of blood in the cornea of the left eye. The symptoms were classic, the infiltration passing through the colors of dark red, reddish-brown, brownish-green and green. The infiltration was progressively absorbed from the periphery toward the center of the cornea in about two weeks. At the end of a month only a slight amount of infiltration remained. At the end of a year the iris was adherent and atrophied and vision was the same as just after the accident: namely, 0.2. Bichelonne, in 1928, published a review of the literature and states that it is curious that during the war, when there were so many eye injuries, this condition was not seen more often, especially as hemorrhagic infiltration so frequently follows trauma.

Bichelonne discusses particularly the pathology, which has been much disputed. Since the cornea has no blood supply, being nourished entirely by the lymphatics, certain authors (Becker, Wernicke) held that in order to produce infiltration there must be a wound, though it might be a small one, of Descemet's membrane. According to Collins and Grignolo, infiltration across this membrane is not sufficient to permit penetration of liquids in the anterior chamber into the cornea. Vossius showed that by anatomic examination one can prove the integrity of the membrane in some cases, and Pisarillo claimed that he was unable to detect any lesion of Descemet's membrane by microscopic examination of the cornea, and, furthermore, he stated that in a case in which there was a wound of the cornea there was no infiltration of the cornea. Talizowsky thought a severe circulatory disturbance occurred in the canal of Schlemm and in the anterior ciliary vessels which resulted in the blood reaching the cornea. It is difficult, Bichelonne says, to make a choice between these and similar theories that have been advanced. It is possible that each, according to the case in question, is partly true, and in some cases the mechanism may be very complex. In the pathological specimen which he describes in great detail there was absolute integrity of the anterior epithelium of the cornea and of Descemet's membrane, with abundant infiltration of the anterior layers of the cornea.

Begle (1914) states that all observers agree that the corneal opacity results from the entrance of blood coloring matter into the corneal tissue. That there is not direct infiltration of blood is evident from repeated microscopic examinations showing an absence of free red blood cells in the corneal stroma. Roemer, Treacher Collins, Weeks, Verhoeff, Terrien and others have found that the brownish pigments responded to the tests for iron. Begle made a spectroscopic examination in one of the four cases which he reports and thus established the fact that hemoglobin was embedded in the cornea in cases of blood-staining.

Baumgarten[8] was the first to examine the small, highly refractile bodies that have been observed in the cornea in cases of blood-staining, and suggested that they are of fibrous origin. Collins thought they were hematoidin particles. Fuchs says these highly refractile bodies look like large cocci or short rods and in some cases hemosiderin is found. Maghy (quoted by Bichelonne) by microscopic study of sections established that these bodies were granules of pigment derived from hemoglobin and their color is due especially to hemosiderin.

F. Thomas[9], in 1929, reported research work which he carried out to determine the method of absorption of hyphema. Blood directly from the heart of a rabbit was injected into the anterior chamber by introducing the needle through the sclera between the iris and the lens and into the pupillary space. For the first two hours the blood remained fluid, but later coagulated. The eyes were enucleated at periods of time ranging from one-half hour to nine days after injection. By the tenth day eyes not enucleated had returned to normal. From a study of paraffined sections of these eyes Thomas concludes that the blood is evacuated entirely by anterior channels. While fluid it is eliminated from the iris angle by the lymphatics along the ciliary veins. Later the blood coagulates on the iris. Particles penetrate into the stroma after destruction of the epithelium and are carried by the lymphatics of the iris to the angle where they leave the eye by the perivenous ciliary lymphatics.

Interesting as some of these theories and investigations are they have thus far still left unanswered the question as to why, in apparently

similar eye injuries, the cornea should sometimes become blood-stained, while in others it remains clear.

A few additional case reports of blood-staining of the cornea have appeared in the recent literature. O. G. Morgan[10], in 1928, presented a case before the Royal Society of Medicine. The patient was a small boy who, while playing with an air-pistol, received a discharge in his face. The following day he was seen to have a small wound in the sclera. There was also some retinal edema. The entire anterior chamber became filled with blood. There was increased tension and considerable pain. As no change was perceptible for two or three weeks a paracentesis was done, but the aqueous was pale, and without blood content. It was, therefore, concluded that the trouble was entirely in the cornea. Treacher Collins, in discussing this case report, said he had seen several cases of blood-staining pigmentation of the cornea and in all of them it happened after concussion injuries. It usually occurred in patients who had raised ocular tension. Blood was effused into the anterior chamber, where it became stagnant and was unable to escape. Usually there was some blocking of the chamber, and the crystals of hematoidin were precipitated in the substantia propria of the cornea. Eventually the condition always cleared up. Recently Dr. Harvey K. Fleck has reported a series of seven cases of hyphema, four of which showed blood-staining of the cornea. He says that the usual cause is an injury, with or without penetration of the globe. In six of his cases there was no penetration of the globe. In these cases the length of time the anterior chamber remained filled with blood varied from six to ninety days. Fleck and other writers express the opinion that the length of time the blood remains in the anterior chamber is probably the principal factor in the discoloration of the cornea.

In the reports of cases of blood-staining of the cornea little is said with reference to the treatment, but apparently in the majority of cases absorption has taken place spontaneously and more or less slowly over considerable periods of time. Fleck recommends that in severe cases of hyphema the anterior chamber should be washed out early, if there is no indication that the contents of the anterior chamber are being absorbed.

The fact that hyphema is frequently secondary to cataract operation should not be overlooked. Cousin[11] places the incidence at seven percent and warns that the complication is most frequent in patients with high blood pressure or diabetes. According to Cousin, the hemorrhage in these cases comes from the corneoscleral section and not from the iris.

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STATE MEDICINE*

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Thirty or forty years ago the status of the family physician was all that the name implies. He not only advised his patients in regard to medical and surgical procedures but also in financial, domestic and a myriad of other difficulties. Thus he was intimately acquainted with the family history, past history and environmental influences, as well as the physical and mental condition of his patients from one year to another. Under the circumstances his patients were well satisfied with the doctor who so well practiced curative medicine.

In the past thirty years there has been a gradual evolution of society. At the present time people would not be at all satisfied if medicine were practiced as it was thirty or forty years ago. To them the mystery of medicine is all gone because they now are well informed about many diseases and conditions. This is due largely to the teaching of hygiene in the schools, health topics in the daily newspapers and current magazines, health talks over the radio, health pamphlets issued by insurance companies, frequent association with the nurses of the public health service, and familiarity with the objects of different health surveys. They know that many diseases, such as malaria, typhoid, diphtheria, smallpox and others are largely preventable. If these diseases are prevalent in the community they ask the medical profession for an explanation.

Time also has brought changes in the medical profession. Instead of practicing almost wholly curative medicine, it now is both preventive and curative. Preventive medicine is the direct result of excellent laboratory work correlated with a well functioning public health service, and, that which is so often forgotten, the co-operation of the medical profession at large. One of the important changes in our profession is the tendency of a recent graduate or a general practitioner to become a specialist, or so-called specialist, in some particular branch. This has had a tendency to destroy, in various ways, the close relationship between the family physician and the patient. It is often difficult for a family to know just whom to regard

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as their medical adviser. It may happen that in a comparatively short space of time they have required the services of one or more specialists—obstetrician, gynecologist, pediatrician, otologist, ophthalmologist, orthopedic or general surgeon, dermatologist, and perhaps a genito-urinary specialist—whom they call of their own volition. By the time they have received adequate attention and, I might add, left the hospital—because the tendency to send patients to the hospital is at present only too great—they have decided that the cost of medical care is beyond their financial status. This is due largely to the economic conditions of today which are brought about by high pressure salesmanship and the amount of credit freely extended, especially by automobile and radio dealers and others.

Fully eighty precent of our population who have incurred bills due to sickness or accident are crippled seriously financially. Four percent have sufficient wealth that they need not concern themselves about the cost of sickness. Approximately fifteen percent give no consideration to the professional and hospital services rendered, since they are recognized as indigents and objects of charity. A part of the eighty percent might be regarded as medical charity, for they do not pay their bills. This, then, leaves the bulk of our sick population made up of average individuals who at present are presenting a great problem to society at large. There has been so much dissatisfaction and discontent, not only on the part of the recipients but also the donors of medical service, that a remedy for this situation is being earnestly sought. Some individuals believe that state medicine is the panacea.

In 1922 the *Journal of the Michigan State Medical Society* discussed the dissatisfaction of the public with the existing situation in medicine. It stated: "The tendency of the day is that when any group of citizens cannot afford to purchase certain privileges, services or needed comforts, the demand goes forth that the state supply to them that which they cannot now obtain. The state and county usually comply with the present demand of the citizens. We are fearful that we are on the eve of such a demand from the people. What are you going to do about it?" The same year the president of the Ohio State Medical Association made a similar statement and asked a similar question. Five years later the Twentieth Century Club, the Carnegie Foundation, the Rockefeller Institute, and one or two other organizations decided to finance a group for a comprehensive study of the costs of medical care. This group is headed by Dr. Ray Lyman Wilbur, Secretary of the Interior, and has been functioning for two and one-half years. The committee so far has developed three facts:

First: The personal relation between the physician and patient must be preserved in any effective system of medical service.

Second: The concept of medical service of the community should include a systematic and intensive use of preventive measures in private practice, and effective support of preventive measures in public health work.

Third: The medical service of a community should include the necessary facilities for adequate diagnosis and treatment.

In the past fifteen years the medical profession has been too apathetic and lethargic to give the economic unrest proper attention and to visualize what will happen should it continue. Perhaps we feel that no change is necessary and the people are at present being cared for as well as they possibly could be under any system.

If state medicine is desired, it should be understood just what is meant by this term. To most physicians it is a "shibboleth of fear and a watchword of danger." It is abstract in the minds of many, and no wonder, as it is absolutely non-concrete at this time. A definition of it as given in 1922 by the American Medical Association for the purpose of a resolution is this: "State medicine is hereby defined to be any form of medical treatment provided, conducted, controlled or subsidized by the federal or any state government or municipality, excepting such services as are provided by the army, navy or public health service, and that which is necessary for the control of communicable conditions, the treatment of mental diseases, the treatment of the indigent sick, and such other services as may be approved by and administered under the direction of or by a local county medical society and are not disapproved by the state medical society of which it it a component part." Another definition which is not so lengthy is the following: "State medicine is the extension of governmental activity in the health field by creating compulsory health insurance, or free and pay clinics, or distributing physicians or seeing free and complete control of medical practice as a public utility." A very short definition for state medicine might be "Medical economics." Certainly we might say, state medicine is the result of economics.

We can only surmise how helpful or how vicious state medicine could be in our country after a study of the successes or non-successes of this system in countries where it abtains at present. Perhaps we should know something of its history.

State medicine was conceived in Germany in 1883 and was the result of Bismarck's idea in regard to governmental insurance. He thought it necessary for political reasons. Approximately two-thirds of the population of Germany are being treated by state-paid and state-controlled physicians. In 1927 there were 40,000 so-called "panel" doctors, each physician caring for an average of thirteen hundred people. Approximately one-third of the people have not accepted this "panel" system, although it represents almost fifty years, or two generations of continuous service. It was stated in an editorial of the *Illinois Medical*

Journal in 1929 that the state controlled system had given Germany the worst medical system of any civilized nation in the world.

In 1911 Lloyd George of England brought forth the National Health Act, which is better known as the panel system. As in Germany, each physician has on his list approximately thirteen hundred people. Any physician may be placed on the panel. In 1927 there were thirty-seven and one-half thousand physicians on the panel list in England, Scotland and Wales. Not all the people have accepted the system and there is a high percentage of private practitioners. "The consensus of opinion, if a logical deduction can be drawn from four hundred or more papers of the same tone, is that this panel system is not an entire success."

Years ago many of our foremost medical minds stated that state medicine was inevitable and took the attitude that the practice of medicine was a function of the state; further, that state medicine is an economic necessity, and figures have been quoted in proof of this statement. For instance, each year several hundred millions of dollars are spent for drugs, of which so many are useless. Two billion dollars is spent by industries for illness; six billion for lives that are needlessly lost; one billion two hundred million for hospital maintenance; ninety millions for funerals, and only sixty-five millions for public health. It is a noteworthy fact that many individuals who are writing in favor of state medicine are now employed in public health service. Perhaps this is only a coincidence; or it may be that, due to their work, they are more conversant with the possibilities of state medicine. They point with pride to the efficiency of the army and navy medical corps, and speak of the healthful environment in the Panama Canal Zone, where there are no private practitioners. It also is pointed out by them that state medicine will abolish quackery and secret nostrums, and that there will be no fee splitting and no unnecessary operations. Also that one-third of all the doctors in the United States at present are deriving some income from the army, navy, federal, state or some municipality. Also that the average income of the physician, should it be paramount to that of medical officers in the navy, will be increased over what it is at present; also, that most advances in medical science have been made by salaried men, and that in future years this will be even more so; also that the government will see that physicians are placed in sparsely settled communities which are now unable to support doctors. It is also stated that since the government takes care of the blind and deaf, feeble-minded, insane and others chronically ill in institutions, it might as well take care of the acutely ill; also that at some time there might be a dearth of richly endowed hospitals and this would cause many of the aforementioned eighty percent so much financial discomfort that they would automatically coalesce with the fifteen percent also mentioned before and would appeal for state aid. They argue that good men do good work under any scheme.

Arguments *against* state medicine are advanced with equal vehemence. It is stated that state medicine will attract the weaker members of the profession, who, because of their poor training, deficiencies, or inherent qualities, are barely able to eke out a living; and that the higher type physicians and surgeons and different specialists will feel the most hardship if state medicine is established. Further, that medical education at present is so expensive that desirable young men will not care to have so much money, time and energy invested in a medical education which will, at the end, give them only a salaried position. Also that state medicine will abolish individuality, which will in turn take away initiative; that outstanding excellence wins neither praise nor reward from government or people; that it formalizes the relationship between physician and patient. It has been estimated that if state medicine becomes universal the expense will be approximately the same as our educational expense, which is, in round figures, two billion dollars each year. It has been further written that "state medicine has a tendency to develop neurotics, quackery and cultism; that it paralyzes medical progress, undermines medical initiative, does not recognize merit and forgets stimulation of medical research." "Experience shows centralized administrative federal or state activities dealing with health become bureaucratic and occasionally is subject to political debasement." It is further stated that state medicine may be present in other countries, but that it is less applicable to individualistic America; also that there always will be independent practitioners of medicine and these will be the most competent in their communities.

Until we stop to consider we do not realize the ramifications of state medicine, as we have been entirely too individualistic, too willing and too unthinking in accepting conditions as they are. Perhaps we have not analyzed the full import and significance of our state compensation laws. Perhaps we have never regarded our federal government as a competitor in the hospital field as well as in the arena of private practice. In June, 1924, it was decreed by legislation that any veteran, be he extremely wealthy or poor, could, by proving the existence of a disability and by leaving the hospital facilities in his own community and also his attending physician, enter a government hospital and be cared for free of charge. The government even pays transportation to and from the hospital. We have no reason to assume that the veteran will be cared for any better at a government hospital than in his own community hospital. It was estimated in 1918 that the veterans' medical and hospital requirements would reach the peak in fourteen years, or in 1932. Now, in 1930, many government hospitals are to be built but will not be completed until the necessity is on the decline. In fact, if we accept the report of the American

Hospital Association for 1929, in which statistics are given showing that over the United States there was an excess of thirty-three percent over the necessary number of beds, we feel that there is no necessity for further competition by the government in regard to hospitals if they will place the veterans in hospitals already in existence.

Many states have laboratories under state control which are being operated in competition with privately owned laboratories. The chief argument for their existence seems to be that it is highly necessary because of the public health service of the state. It may be, too, that to a certain extent the health of a state is protected by the government venereal clinic. Certain states have universities with a medical department requiring a certain number of beds for clinical instruction, both to students and internes. Some objections are raised to the manner in which many of these patients are obtained. In certain sections there is no direct appeal to the physician to send patients who represent interesting clinical entities. Instead the people themselves are appealed to through such civic organizations as the Rotary and Kiwanis clubs, by means of moving picture reels showing hospitals and equipment, patients upon entering and upon leaving hospitals, and in fact of such a nature as to engender into the minds of the people that superior service is granted in that institution, and that with an increase in size more patients could be benefited by this hospitalization. Also, pamphlets having the same appeal and general effect are distributed to the laity. It also often happens that the emissaries of these institutions have no hesitancy in making remarks upon the superior advantages to be found in these medical centers. Their chief desire seems to be to keep all the beds occupied, it making no special difference to them whether or not the patient is indigent. If the size of an institution and the number of patients therein are an indication of its superior advantages we might wonder why general appeals are not made to the laity for more feeble-minded and insane patients for corresponding state institutions. It so happens that the seed has landed on fertile soil and that individuals have journeyed to this mecca of superior medical and surgical service at the expense of the hospital and medical advantages of their own community.

What about state medicine in other states? A year ago Doctor Bigelow, writing in the New Jersey State Medical Association publication, and dealing with the experience of state controlled cancer hospitals in Massachusetts, stated frankly that they typified state medicine. It is interesting to note that at the present time there has been given to the legislative committee of Massachusetts a bill which, if enacted, will give Massachusetts state medicine in its entirety. This is remarkable, since Massachusetts is a small state geographically and has one of the best medical centers in our country. However, it is not remarkable, since it is only an example showing that when state medicine makes an inroad it is much easier to expand in other directions.

Many of us feel that state medicine will prevail more and more, but not to the extent that there will be no private practitioners. It is largely dependent upon the different medical and hospital associations. It is a subject which should be kept constantly before these organizations. Whenever a large proportion of people are affected adversely there is bound to be a reaction, and an amelioration will be demanded. We know from political economy and sociology that the mass invariably rules. If there is something wrong with the manner in which the health of our nation is being cared for, the medical profession should be the first to recognize and first to rectify the condition. If every physician would apply in his practice all that which he knows about public health, preventive medicine and curative medicine, there would be less dissatisfaction with the medical service in the minds of the public. The liaison between the public health service and the medical profession should be the health officer of the community. It is exceedingly important that the health officer be a *representative* medical man chosen by the county medical society, and that no politics be displayed. The state medical society should have at all times a more than vigilant committee whose function it will be to cognizate itself of all impending legislation, and to ascertain whether or not it will affect the medical profession, advantageously or otherwise, before it has become crystallized into a bill. We are to remember that that which is derogatory to the medical profession is harmful to society. Also, that no system of practice can be successful which disregards the close personal relation between physician and patient.

Dr. William G. Morgan, president of the American Medical Association, wrote in the official journal a short time ago that if state medicine becomes a reality it will be due to "blatant propagandists, unthinking sentimentalists, political tricksters, or noisesome newspapers". It is largely up to you and me whether or not we have state medicine.

Discussion

M. A. Austin, M.D. (Anderson): I do not know whether you gentlemen realize it or not, but you have heard a paper that probably in two or three years from now you may say was the most important paper read at this meeting.

Doctor Beeson mentions the fact that the Massachusetts legislature had a bill to entirely socialize the medical profession of the state, and when it came to vote it lacked just one vote of going through. For the past twenty years it has been a hobby of mine to study some of the economic conditions in medicine. In 1909 I wrote the first of a series of twenty articles dealing with medical economics, going into a survey of conditions as found in Germany, Austria, France and England, taking up the Krankenkassen in Germany and Austria, and the Friendly Societies in England.

At the time I wrote the articles a number of my friends thought I was out of my head and laughed at the idea that socialized medicine would ever have a place in America. The other day I picked up one of the articles I had written in 1912, and a number of the things I said were possible or probable already have come to pass.

At the present time we are on the verge of an industrial and economic revolution and nobody knows what the end will be, but we know the present seriousness of the situation. One phase of what is being put out in the way of propaganda for state medicine is illustrated by an instance that happened at the American Legion District meeting in Anderson in February. Congressman Albert Vestal, in addressing the American Legion, congratulated the members on the many things that had already obtained, and stated that they were just beginning to come into their own. He said, "We have not only given you free medical service in government hospitals for anything that is the matter with you, no matter whether acquired in war service or not, but we are giving you additional hospital beds so that every member of the American Legion can send his dependents to these hospitals and have this same free medical service." He also stated that he expected to have a bill before the House that would give compensation to every family whenever a soldier was sent to a hospital for any illness or disability, no matter where or how he got it, and during the time of his incapacity and while at the hospital his family would be provided for out of the public funds. We have over four million ex-soldiers; we have over twenty million dependents upon these ex-soldiers. One-fourth of the population will have free medical care at government expense within the next two or three years unless this growth of government hospitals is controlled in some manner. At the present time forty-five percent of the beds in the government hospitals are occupied by soldiers with disabilities that have no connection whatever with government service. At the present time many millions of dollars have been appropriated for government hospitals to be built within the next two years, and yet the government statistics show that there are less than six hundred soldiers actually suffering from war disabilities that are not being cared for at present in government hospitals as they should be.

I could take up a good deal of time going into various aspects of this question. One phase concerns the action of doctors in the state in relation to the Indiana University program for the benefit of the Indianapolis hospitals. Also the action of some of these welfare workers who are parasites. Then there are those who have a few ideas and a little bit of money and some leisure time who break away from bridge or golf or something else and start a movement for the betterment of somebody. And the doctors have been getting the worst of it all along the line. Unfortunately, these people seem to be able to put a lever under doctors in most every community and can get somebody to do their free work. That is one of the phases of state medicine in every community, and you will find it is being brought about to your detriment. I wish all of you, if you can do nothing else, would give a little bit of thought to what is coming to you sooner or later.

Nearly every magazine or journal you pick up contains an article on the so-called high cost of illness and medical and hospital care. The end result of these will be to have the so-called middle class demand that the burden of illness shall be a community problem, the same as has been done with the hazards of industrial accidents.

ROSCOE H. BEESON, M.D. (closing): I presume one reason why there is so little discussion about state medicine is due to the fact that we have been asleep at the post and have not informed ourselves concerning it. We cannot give ourselves credit for being any more or any less intelligent than the average doctor in England. In 1911 the members of the medical profession in that country were thunderstruck to find that they had "state medicine"—something they were quite sure they did not want. Since that time there has been more discontent in medical circles than ever before.

It was my pleasure a few weeks ago to obtain some first-hand information from the lay point of view concerning the panel system in England. I was talking to a very intelligent young man whose home is in England. He stated that his observations led him to believe that the panel doctors were of the type who followed the line of least resistance and cared very little about practicing the science of medicine. He made the statement, which impressed me greatly, that sixty percent of the people did not see their panel doctors during the year, and ventured to say that fifty percent of the remaining forty percent would call a private physician "if they were seriously ill."

It is up to the medical profession to be on the *qui vive*. It is reasonable to assume, considering the prestige of every doctor in his community and figuring that there are 140,000 physicians in the United States, that if they would use their influence against state medicine it would have something to do with defeating it.

Doctor Austin expressed it well when he said that you should be enough interested in this proposition to give it much thought and realize what is coming to you. It is coming; it is in every state in our union in some form or other, and whether we like it or not we are going to have state medicine.

I would make one final appeal. Just remember that anything which affects the medical profession as a whole is bound to affect you, because you are an integral part of it. It is up to the medical profession and the hospital associations whether or not we have state medicine.

LYMPHO-SARCOMA OF LEFT TONSIL*

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This case is of particular interest from a clinical standpoint, on account of the age of the patient. Examining case reports of sarcoma of the throat for the past ten years I have not found a case that approximates this patient in age.

Lympho-sarcoma does occur in the throats of children. Kaufman, of the University of Sweden, states in his textbook that he found a lympho-sarcoma the size of a plum in the throat of a boy five years of age. The tonsil, however, is not an infrequent seat of sarcoma; there are two types usually attacking the tonsil, the small, round cell or lympho-sarcoma and the spindle cell sarcoma. The spindle cell sarcoma generally becomes incapsulated and does not early invade the surrounding tissues. The lympho-sarcoma usually early in the disease spreads to the neighboring glands. It is obvious to me as a private conviction, a conviction for which I do not wish to battle, a conviction that I do not wish to force upon others, that there is a difference in the degree of malignancy in these neoplasms from the beginning. Sarcoma of the tonsil is to be differentiated from the para tonsillar abscess, syphilis, tuberculosis and epithelioma. The diagnosis of para tonsillar abscesses is easily made by the rapid development of para tonsillar abscesses. The differential diagnosis of sarcoma and syphilis is exceedingly difficult and oftentimes requires time, skill, and patience. Epithelioma is generally diagnosed by the laboratory.

R. W., white, male, age seven, was admitted to the Indianapolis City Hospital on September 30, 1930, with a mass about the size of a golf ball in the left tonsillar fossa, which produced no symptoms other than a slight difficulty in swallowing and talking.

Three weeks previous to this time he had been seen by Dr. Roy Mayers, at which time he presented symptoms of diphtheria, sore throat, hypertrophy of both tonsils with marked injection, and a membrane covering both tonsils. Cultures from this membrane failed to grow diphtheria bacilli but smears showed Vincent's organism. Under treatment with copper sulphate and sodium per borate the Vincent's infection readily yielded and in a few days the throat was normal except for the hypertrophy of the left tonsil which persisted and at the end of the week had increased in size. This time he was sent to the hospital for a tonsillectomy.

I saw him at the City Hospital on the morning of October 1st. Family history negative. The patient's past history was essentially negative. He had always been a healthy boy; no illnesses except measles and diphtheria at the age of three. Physical examination revealed a normal and well-nourished white boy. Heart and chest negative. There were a few small cervical axillary and inguinal lymphnodes palpable. Stereo films of the chest including the cervical vertebræ showed all the bone tissue normal. There was a slight bronchial adenitis with the lung fields clear. No evidence of thymus gland. Urine negative. Blood Wassermann negative. Red blood count, 4,600,000; white blood count, 8,900. Differential: polymorphonuclears, 75; small lymphocytes, 20; eosinophiles, 2; basophiles, 1; large mononuclears, 2.

The mass in the throat was confined entirely to the left tonsillar fossa. It was firm upon palpation, purplish in color, and bled easily. It resembled somewhat a para tonsillar abscess, but aspiration in two places revealed no pus.

On October 8th, under ether anesthesia, a tonsillectomy and adenoidectomy was performed. The right tonsil was removed by a modified Sluder and the left with a blunt dissection and snare. The mass from the left tonsil fossa was friable, vascular and came away in pieces; however, it left a clean fossa with normal anterior and posterior pillars and only a small amount of distortion of the soft palate at the superior pole. The posterior pharyngeal wall was apparently normal and likewise the nasopharynx and the right tonsil fossa.

The biopsy report from the specimen taken from the left tonsil fossa is as follows: "Some normal tonsil tissue present. Most of the section consists of a type of cell larger than those of tonsillar tissue, taking a less dense stain, and are crowded in the meshes of a loose areolar tissue. Suggest that the malignant posibilities of this tissue be kept in mind."

The patient made an uneventful recovery and at the end of three days was released to return in three days for observation, which he did. At that time his throat presented a normal healing membrane in each tonsil fossa with no evidence of any new growth. Unfortunately the boy was not seen again for fourteen days on account of the quarantine for scarlet fever in one of the children in his home.

On October 24th he was readmitted to the hospital at which time there was a definite cauliflower mass making its appearance in the left tonsil fossa extending upward to the superior pole and into the soft palate.

X-ray therapy was instituted immediately. Four exposures at weekly intervals were given in the following dosage: 150,000 volts, 25 milliamperes, 50 centimeters distance, .75 mil copper, 1 mil aluminum filters, 5 minutes.

During this treatment the mass gave no evidence of retarding and on the contrary was growing rapidly in size and was extending over the soft palate into the right tonsil fossa and into the right nasopharynx. Another stereo view of the chest and neck showed clear lung fields and no evidence of metastases. Films of the para nasal sinuses

*Presented before the session of the Indiana Academy of Ophthalmology and Otolaryngology at Indianapolis, December, 1930.

showed some thickening of the mucosa of each maxillary antrum. The bony outlines were normal.

By this time the mass was becoming so large that it caused considerable difficulty in swallowing and breathing. On November 20th, under sodium amytal anesthesia (six grains intravenous) Dr. E. N. Kime did an electro-coagulation of the cauliflower mass—the mass at this time extended from the inferior pole of the left tonsil fossa into the soft palate and the hard palate and nasopharynx and to some extent into the right tonsil fossa. A tracheotomy was not found necessary. Nasal tubes were inserted both for feeding and aspiration of the secretion from the throat. A stormy postoperative career followed during which the temperature ranged from 103 to 107 degrees and the pulse from 150 to 180 and terminated in death on the morning of the third day.

Biopsy report of the mass is as follows: "Section consists of a dense mass of cells. The number of cells per unit of space is considerably more than that of a lymph node or tonsil tissue. In some parts of the section they have sort of an alveolar arrangement. The cells are slightly larger than a small lymphocyte. The nuclear does not stain as deeply nor is it as round as that of the lymphocyte. Some nuclei are seen which are undergoing division. The cells seem to penetrate in through the surrounding connective tissue, destroying the same. Diagnosis: Lympho-sarcoma.

DISCUSSION

JOHN W. CARMACK, M.D. (Indianapolis): About a year ago I had a case in which there was marked hypertrophy of one tonsil, which was the first evidence of Hodgkin's disease, proven later. It seems that we are necessarily becoming doctors rather than limited specialists. Here is another field where we can use our general medical knowledge.

Not long ago I saw a case in which there was a large tumor mass in the left tonsil. We removed a section for biopsy and was assured that this was merely a lymphoid overgrowth or hypertrophy of the lymphoid tissue. I was extremely suspicious and had another pathologist see these sections, who confirmed the original diagnosis. After this assurance we went ahead and did a tonsillectomy. Sections of the tonsil postoperatively showed a lymphoid sarcoma.

Cases of this kind, where you have either sarcoma or carcinoma in the tonsil, do not heal well following surgery. The best treatment is either radiation with the x-ray or radium. The point in this second case was that I evidently did not get a section of the tonsil that showed definite evidence of sarcoma. I think we should be extremely careful in these cases, because once we go in and do a tonsillectomy we may have an extensive ulceration in the pharynx which is much worse than the condition would have been had we not operated.

D. O. KEARBY, M.D. (Indianapolis): I saw the peculiar tumor mass in this case a week or ten days before he went to the hospital and there was no glandular involvement—just this peculiar mass and maybe a slight adenitis. From this picture at that time I thought perhaps we were dealing with a lymphatic leukemia. Not long before that I had had a case that I was called to see on account of asphyxia. I could not see in the man's throat very well, but he was considerably asphyxiated, quite blue and cyanotic. His tonsils filled his throat. I took him to the hospital with the idea of perhaps doing a tracheotomy, but when I looked into his throat I thought perhaps it would be just as easy to enucleate one tonsil. When I removed the tonsil it was beautiful to see him recover from the cyanosis. The whole naso-pharynx was filled with a similar growth; no bleeding. He asked me to take out the other tonsil, which I did. All this without any study of the case by the laboratory, since breathing was necessary. The laboratory diagnosis came up to the surgery by the time I was through, and showed a white cell count of 136,000. The patient died a few days later of lymphatic leukemia.

I saw this little fellow and thought perhaps he had the same thing, but the blood, as reported by Doctor Chappell, was normal. In my examination the tumor mass on a little manipulation did bleed fairly easy.

Within the last year I have had two other cases of lympho-sarcoma of the naso-pharynx in adults. One of them came to my office because she could not hear and had difficulty to breathe. The tumor mass had completely covered the orifice of the Eustachian tube. I removed considerable of the mass for study and tried to uncover the Eustachian orifice, and the report came back from the laboratory—lympho-sarcoma. She developed a good deal of a metastatic condition.

The next case was a doctor's wife with a similar condition, studied by three different laboratories and pronounced by all lympho-sarcoma of the naso-pharynx. I removed as much of the mass as I could surgically and then resorted to radium treatment. The patient was gone three months last summer, and when she came home I was much surprised to see how free the naso-pharynx was of lymphoid tissue. At the upper part were two small, edematous masses, perhaps a little larger than a good-sized pea. These were treated by radium, fifty milligrams for two hours at a time, three sittings. I saw her a few days ago, and the mass on the left side has practically disappeared; there is a little on the other side.

JOHN J. SHEA, M.D. (Memphis, Tennessee): The early microscopic study of glands suspected of Hodgkin's presents a cell study like unto a lympho-sarcoma. I had two very interesting cases recently. One of the cases was an early Hodgkin's disease, diagnosed lympho-sarcoma, in a young man, and it was not until it had progressed some time and a second gland studied that I made a correct diagnosis. In an early case of Hodgkin's the pathological picture cannot be differentiated

except by a number of slides. The first or second slide may not show it.

The other case was a little girl who came in with an immense mass behind her right tonsil fossa. The tonsils had been removed, and the history was that she had had the glands on the right side removed, the first gland showing tuberculosis, but a second gland presented Hodgkin's disease. We split the posterior pharyngeal wall and got out a mass about as large as my thumb, and section of this showed chronic tuberculosis. The glands on the left side enlarged and were taken out, and the first slides show chronic tuberculosis. We are asking ourselves, will subsequent slides of this side show Hodgkin's disease? So there is a very close relationship in these glandular enlargements in the young between chronic hyperplastic tuberculosis, Hodgkin's disease, and lympho-sarcoma.

This similarity makes it very difficult for the pathologist to give you a definite diagnosis on a border-line case where there are no true Dorothy Reed giant cells.

RALPH S. CHAPPELL, M.D. (closing): I want to thank Doctor Shea, Doctor Kearby and Doctor Carmack. Hodgkin's disease and lympho-sarcoma necessarily are related, arising in the same parts of the lymphatic structure and the least organized parts of the tonsils, and in the beginning it is hard to differentiate them. This case was a very malignant case and very interesting.

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INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar May 22, 1931)

TRENDS IN MEDICINE

CHARLES P. EMERSON, M.D.

Modern medicine, like an advancing stream, is ever flowing along new channels into a new field. Our medical educators and medical groups must learn not only how to handle the medicine of today, but must prepare themselves for the medicine of five, fifteen and twenty-five years from now. And remember, that if medicine moves forward as rapidly as it has during the last thirty years, the medicine you will practice thirty years from now will be very different from that of today.

Directly in the advancing edge of the medicine of today stand what we call the neuropsychoses. These take into account the mental patterns of the patient, their mental trends, not only their diseases but what they as individuals do about the problems which their diseases create. We hear a great deal about physical patterns; we shall hear more about mental patterns. I hesitate to make a diagnosis of gall bladder disease in a patient of the asthenic physical type. I am very doubtful of a diagnosis of pernicious anemia in a man or woman not of the indifferent physical type, no matter what the blood may show. This study of constitutional pathology recognizes that the body build presents a strong argument in favor of or against certain diagnosis, a very strong argument in favor of or against a good prognosis. In other words, we not only must have what the blood and urine shows, but we must know what the body build is. That is well accepted in medicine today. More recently our attention has been called to the importance of mental patterns in the diagnosis, more in the prognosis, and tremendously in the therapy of disease.

Mental patterns are analogous to facial patterns. A face is normal if it has two eyes, a forehead, a nose, a mouth, two cheeks, etc. But no two faces are alike; one person has a larger nose, or a smaller mouth than others. While no two facial patterns are exactly alike, yet we can in general

classify them in certain types, as an oval, round, square face, etc. So it is with minds. All may be normal, yet there are no two just alike, and these differentiations may be classified in terms of patterns. It is well that in our first talks with our patients we try to recognize what their mental pattern is, in order that we may be able to talk to them better. A man comes to the office with a slight rheumatic mitral insufficiency. Suppose you recognize early that he has a neurasthenic mental pattern. You would talk to him, advise and warn him in a very different way than you would if you recognized that he had a psychasthenic mental pattern. Of course doctors from the time of Hippocrates have tried to size up the personality of each patient and to handle him accordingly. Now we try to do this more accurately and so get on the whole better results. We do not wish to frighten the neurasthenic too much; another we wish to frighten enough. As a well known naturalist said, it takes two to tell the truth. If the listener does not get the right idea then the speaker, no matter how accurate his words, has not told the truth. Certainly we cannot put over our message unless we take into account the recipient. Some doctors are like tailors who would offer each man exactly similar suits of clothes. There would not be many good fits. The wise doctor alters his emphasis in each case so that the patient will "get the idea" and will act on it just as the doctor desires him to. To do this the doctor must have the patient's mental pattern in mind. That is one of the problems which stands out prominently on the advancing edge of medicine.

Some of the mental patterns lead to problems which belong primarily to psychiatry. I think the problems of the neurasthenic and psychasthenic mental pattern are medical problems, and those of the manic depressive and schizophrenic are psychiatrical. I deny that the hysterical patient belongs to the psychiatrist. We have had to study all of these in the past because we did not recognize some of them as our problems.

Each mental pattern has certain very definite features which would seem to depend on the architectonic structure of the brain, or at least to lines of least resistance within the paths of the cell groups. A neurasthenic person may be neurasthenic from childhood and is likely to be throughout life. So it is with many of the psychasthenic, the hysteric, manic depressive, and the schizophrenic mental patterns. In the past we called these diseases, because we recognized them only when in extreme grades, but all of us are more or less of one type although each has elements of all. According to our pattern do we meet the problems of our life, and if we as doctors correctly recognize the types to which our patients belong we will be more successful in our care of a larger number of patients.

The neurasthenic mental pattern has certain marked characteristics. In the first place, the neurasthenic man has the habit of introspection, the attitude of apprehension, and third, he has a liable threshold for sensations and affective responses. He fears he has stomach disease, and he will feel the movements of his stomach. That is, he has a lowered threshold of visceral stimuli. Also his threshold of emotional reactivity is lowered and dysfunctions of various organs of the body, especially those easily reached through the emotional life result: nausea and vomiting, diarrhœa, tachycardia, etc.

Persons who have the neurasthenic pattern have also a sense of inadequacy. This may not be necessary, but unless the child is guided wisely he may develop this.

In speaking of the neurasthenic personality I am not speaking of persons with definite constitutional inferiority or with congenital psychopathic inferiority. Such persons may be neurasthenic to a marked degree; others of them may be psychasthenic or hysterical, but in each case their mode of reaction is only part of a larger problem. To understand a problem clearly we should study it in as pure form as possible.

Anybody can be a neurathenic if he has adequate cause. If a normally minded man suddenly learns that he has a cancer, he is liable to be neurasthenic; but one with a very marked neurasthenic pattern is apt to react in this manner to minor conditions which should not disturb him so.

We separate these neurasthenic from the psychasthenic pattern. The psychasthenic person to our mind from a medical point of view, is the man who continues to use his child-like affective mechanisms when an adult, with the intellect of an adult. In the child the most important thing is the inability to make clean-cut decisions. We call it abulia. But when you articulate the emotional set-up of a child with the intellectual life of an adult and then ask the individual to meet all the struggles that come to everybody who tries to live efficiently, he will have plenty of disappointments and anxieties. Some show more reaction and some less, but in either case we have a perfect psychasthenic picture to which I would urge your attention.

To have a puerile affective pattern does not mean that his effective states are also weak; they may be very strong; but it does mean that the balance will be unfortunate for him.

Neither do I intend to discuss the hysterical pattern, except to exclude it. This can be easily described if you allow an internist to do it. The psychiatrist will probably differ, but he sees chiefly the extreme cases. The hysterical person is one who has a tendency to overvalue his external world, his world of reality, yet cannot control his own reactions to it, but is governed by suggestions over which he has little control in his struggle to have his own way, and that way the easy way, by avoiding the trials and responsibilities of life by escaping into sickness, and yet as a perfectly excusable invalid. The hysteric will be in the limelight; he insists on that, whether his manifestations

be a tremor, a convulsion, or a paralysis—he will dominate the picture wherever he is. There is an old conundrum that used to be asked children: Would the falling of a tree fifty miles from any creature make a noise? The answer is that it could not; because noise requires ears. The question of internal medicine asked when we deal with hysterical patients is: Can a person have hysteria if no sympathetic audience is present? I do not think he can. Put one of these patients with some hysterical manifestations under the care of a nurse who understands this problem and just give the patient to understand that she is not interested, and soon the hysterical manifestations disappear; it cannot go on because an audience is necessary to the picture. The hysterical patient never suffers; if he suffers his trouble is not hysteria. Hysteria is a great mimic; it can mimic almost any organic disease, and some others. You do not know internal medicine unless you can recognize hysteria.

Neither am I talking about the schizophrenic mental type. This is actually the reverse of hysteria. The patient cares nothing about the external world; he shuns everyone and shuts himself up within himself and lives the autistic mental life, the dream life. The hysterical patient is careful never to do anything that is at all discreditable to himself; he is always careful to be blameless, above reproach, to be pitied and excused. The schizophrenic patient cares nothing for the world of reality; nothing for appearances; he desires to be let alone. What it is these people are thinking about in their dream world we do not know because they cannot tell us anything about it. Yet they act and speak in terms of a mental life of unreality which is quite inharmonious with the life of reality, as though some hidden power were framing their words and moving their limbs. We can know the mental life of many of our patients of the psychasthenic and neurasthenic groups, but we cannot even imagine what the chizophrenic is up to, nor can he.

Neither am I going to talk about the manic depressive type, because that belongs to the psychiatrists. But I do say, whether we like it or not, that the manifestations of the mental patterns of hysteria, psychasthenia and neurasthenia belong to internal medicine. They are in the pathway of our progress and we must meet them.

Why is this an internal medicine problem? Because these are not new patients to us. They always have filled our wards and for the same troubles, only now these same troubles bear different diagnostic labels and receive different treatment. I would remind you of the Emanuel Movement started in 1903 by Doctor Worcester of the Emanuel Episcopal Church of Boston. He said to a few doctors in Boston who stood at the head of the profession, "If you will guarantee that certain patients are free from disease, I and my assistants will be glad to try to help them by means of religious psychic therapy". That clinic ran for about two years and then was dropped in its original form. The movement was tried in other cities, but they were not under a Doctor Worcester, so they promptly failed. A little later I asked one of the doctors who was doing the physical examinations for this clinic why it failed, and he said, "The trouble was that our medicine is not far enough advanced in order for us to do our part". Doctor Worcester was a remarkable man. He was trained as a doctor of philosophy, a psychologist, a psychiatrist who had studied under Kraepln, and a neurologist under Erb. Then he went into the ministry. But a man who had a Ph.D. from Leipsic in the above subjects was better trained for that line of work than were most psychiatrists in America. After he entered the ministry he evidently thought he should not allow all this splendid training to go by default, so he tried to help these patients, provided they were free from organic disease. This doctor said: "The reason why this failed was that one girl who last year we said had a nervous cough came back this year with marked pulmonary tuberculosis; and a man who we said last year had a nervous stomach this year came back with a cancer. Medicine is not far enough advanced to say whether a patient has early organic disease or not." Since then we have developed all of our medical x-ray, all of our blood chemistry, serology, functional diagnosis, clinical psychology. Now we could do better for a man like Doctor Worcester if we could find him, but even now it would be hard enough.

At the time of the Emanual Movement I was resident in a large hospital in the East. Thirty percent of our diagnoses were "neurasthenia". I now believe many of those were wrong. Fifty percent of our medical cases went to the surgeons, and I now believe that many of them should not have gone. In other words, in 1903 a mistake was made at both ends of the line. The persons who were not neurasthenic we called neurasthenic because we could find nothing the matter with them. They may have a neurasthenic trend, but many must have had an organic disease too early for accurate diagnosis. But the patients who were neurasthenic and nothing more, what did we do with them? We sent too many of them to the surgeon who did a double oophorsotomy, who suspended the uterus to the abdominal wall; who suspended the kidneys and the stomach; who short-circuited the bowel; who removed the appendix for pain only; who removed the thyroid gland; who opened the nasal sinuses. In other words, these were the neurasthenic patients. Not all thyroidectomies are unnecessary; not all sinuses should be let alone; many an appendix should come out, etc. I am talking about those cases only where the indication for operation is not clear, where the suffering is out of proportion to the condition found; these are neurasthenics. They ought to be let alone. I had one patient who had had nine abdominal operations, and recently one

who had had in all seventeen operations. These are the neurasthenics. I am not criticizing the surgeons at all. The point is that in 1903, and probably in 1910, we called neurasthenics those whose physical condition could not then be recognized, and we were sending to the surgeons those whose conditions suggested a physical condition.

As evidence of the neurasthenic trend we have the habit of introspection, the attitude of apprehension, and the tendency to maladjustment and substitution. The objects of introspection may be either the patient's physical or mental functions. The apprehension produces anxiety states, but in neurasthenia they usually remain attached to the cause itself or to the substituted focus, and when the cause is adjusted the apprehension disappears. In psychasthenia, on the contrary, the affective state is primary. The psychasthenic person is looking around for something to be anxious about, and when you relieve his fear of one object he finds something else to be afraid of. Another result of introspection and apprehension is a lowering of the thresholds of organic sensations and affective reactivities. The patient feels each heart beat; the digestive processes become painful; also the functions of the organs concerned are overdone, excessive, and these dysfunctions if continued long enough become organ-habits, conditioned reflexes, and these in turn can lead to tissue changes.

Another feature which is common in neurasthenia is the tendency for the patient to maladjust himself to his condition. For illustration, a man is told by his doctor that he has a slight trouble. He may adjust himself well to this knowledge by accepting the handicap which this imposes on his activities, and doing the best he can to follow the plans laid out by his doctors for his future treatment. Or he may refuse entirely to adjust himself. That is, refuse to recognize the evidence of his trouble as some religious organizations would have him to do. Or, he may adjust himself poorly, worry about his trouble, watch all of his symptoms, doubt the accuracy of the diagnosis and the wisdom of the treatment outlined for him, and so go from doctor to doctor, comparing their statements and seeking for differences between their possibly synonymous terms. This last is what the neurasthenic person is very likely to do. He also has a faculty for substituting a physical focus of emotional interest for a genuine social problem. For illustration, a patient came to our office with pronounced heart symptoms. He had no cardiac disease, but his heart was dysfunctioning in a spectacular manner. It turned out that he had domestic trouble, and he was focusing the emotions involved in that upon his heart. In other words, the heart was acting as a substitute. Those with other mental patterns handle their worries in other ways, but the neurasthenic has a tendency to substitute for these some dysfunction in the physical realm. During the first year I was in Indiana a doctor brought his wife to me for stomach trouble. I simply could not find a single thing the matter with her. Finally I gave it up and told the doctor so. He went to a rival consultant across the corridor and came back in twenty minutes and said, "Doctor Blank found the trouble in fifteen minutes. Her stomach is two inches too low." But six months later I found that he was too intimate with his stenographer and his wife had found it out. When he straightened himself out she was cured. About a year after that another doctor brought his wife, who was suffering from backache. We x-rayed her back, her stomach, and every other part of the body and could find nothing wrong, so I gave it up." The divorce court six months later showed what was wrong.

I would like to take issue with the psychiatrists who use the term "fatigue" as a characteristic of the neurasthenic states. We may use the term "asthenia," but that does not commit us. What the feeling of extreme tiredness which these patients feel is, I do not know; but it is not fatigue. It is really a mental state. It is not lack of ability to exert effort, but to do so persistently. This point is important since many give the exhaustion following typhoid fever as the best illustration of neurasthenia. This toxic asthenia is due to the effect of the toxin on the nerve cell itself. That is true fatigue. The extreme grades of this is a toxic psychosis. This toxic asthenia may lead to a neurasthenic reaction, but that is a different matter. Tuberculous patients often are neurasthenic, not because the toxin of tuberculosis weakens the patient, but because the tuberculous patient does react well to his disease. We see it often in lues, not because of the direct effect of the toxin on the brain, but because the man has a disease of which he is ashamed; it is his conscience, his reaction to his condition that leads to the neurasthenic state. We get it in heart troubles that frighten the patient; we get it in cerebral arteriosclerosis and in paresis early. The neurasthenic reaction makes conditions that are a little painful very painful. If they are too painful there is no neurasthenic reaction. In other words, almost any disease may lead to a neurasthenic reaction provided it is not serious enough to make the man very sick or to hurt him much.

The dysfunctions we get in neurasthenia are of those organs which respond easily to effective states. Among these the stomach stands first, and manifests it by pain, hyperchlorhydria, and vomiting, all in large degree the result of retroperistalsis. Few of the cases of gastric trouble have any gastric disease. Certainly not one in ten, one surgeon said not over one in twenty. In many of these cases the reflex which causes the gastric symptoms is from the gall bladder, appendix, and other organs, but many such reflexes are due to a lowering of the threshold of affective reactivity of that organ. The stomach, in other words, is like a fire alarm. Its disturbances are seldom alarms of gastric disease.

The colon also stands high in this group. It is directly under emotional control. The evidences of its dysfunction are visible under the fluoroscope as "irritable colon," and clinically as mucous colitis or nervous diarrhea and flatulence. True, many cases of irritable colon are evidences of colitis or of diseases of the appendix or gall bladder, but in the absence of these things the chances are that such dysfunction is evidence of a neurasthenic pattern in action.

The heart is much influenced by the emotional states: palpitation, cardialgia, tachycardia, and neuro-circulatory asthenia usually called "myocarditis," Few indeed are the cases usually called myocarditis due to any disturbance of the myocardium, and yet thirty percent of all patients sent to heart clinics come with that diagnosis and are nothing but neuro-circulatory asthenia, which is a form of neurasthenia. These were the patients with variable heart rate, great weakness, shortness of breath, and anginal pains, that at first filled the wards and who were treated for myocarditis. Later they began to deal with them differently. They put these patients at hard work and found that they stood the exercise as well as any soldier and later developed no trouble.

Another organ which is indirectly very much under the control of the emotions is the thyroid gland. We spoke of that two years ago. The pancreas also is indirectly under emotional control. Woodyatt recognized this when he said that in diabetics it is more important to follow the emotional curve than the blood sugar curve. Then we have the genital system, very responsive to the effective states. And finally, many of the post-traumatic neuroses are neurasthenic states. The person who is sick cannot be neurasthenic. The man who is in an accident who is not hurt physically is apt to develop a neurasthenic state. If he gets hurt badly enough he will be saved from the neurasthenic state. That is, a neurasthenic reaction is inconsistent with reality. Slater called attention to the fact that if a man likes his job and gets hurt he does not develop a post-traumatic occupational neurosis; but if he does not like his job he will; and the best treatment for such a patient is to get him a job he likes. Students in a football game often get hurt worse than men in factories, but they do not develop neurasthenia because they like their game. An operation on a neurasthenic relieves him of his neurasthenia for a period, no matter what the operation, provided its purpose was to cure his neurasthenic symptoms. He will have no more symptoms for from six to twelve months, and then when the neurosis returns it will often assume a different form. In other words, the operation is "real" enough to serve the purpose of a safe accident.

Due appreciation of the neurasthenic trend will be necessary in the medicine of the future. Many of our patients have this whatever their physical condition. In each case there is to be considered the mental pattern, the lesion, the patient's reaction to it, the dysfunction that follows, and the results of these. For the case of a neurasthenic we need a nurse who knows the work, who knows what the doctor expects of the patient, and who will see to it that the patient does what the doctor wants. If she shows the least lack of confidence all is off; the patient will not trust her. A good nurse determines the success or failure in the cure of neurasthenic states. This treatment should begin with rest in bed until the insomnia and anorexia are conquered. It means building them up physically by diet. Then we must educate, educate, educate. Point out to the man that he has a neurasthenic mental pattern, where his weak points are, that he must be conscientious in establishing new habits, and then see that he goes to work.

When we come to the patient with an hysterical mental pattern our problem is still harder since it is difficult to so treat their physical disease that we do not increase their hysterical trend. That is hard in the neurasthenic case; it is worse in the hysterical.

We pity the patients in the hospitals of the Middle Ages. So prevalent and virulent were the hospital epidemics then that admission to one of the large hospitals of Europe was almost equivalent to a death sentence. In general, it was better to stay at home. Now we smile at those days. But our wards now are making the neurasthenic and psychasthenic and hysteric patients worse than when they came in. The things our patients who come to the hospital with a broken leg, or a pneumonia, see, what they hear in the wards, the things other patients say to them—the effect of this must be considered as one of the important hospital problems of the future.

Therefore, the problem of hospital administration in the future is to protect the patients against psychical insult, as we formerly protected them against germs. I look forward to a time when each patient shall be in a separate cubicle; when no two patients can talk together in a ward; when there will be more careful discussion of patients before them; when the decision of the mental pattern of each will be indicated in some way at the head of the bed in order that the doctor and nurse who handle the patient will know his problem. Then we will be able constantly to guard the patient against those suggestions and sights which may increase the neuropsychosis which is theirs because of a congenital mental pattern.

SPECIAL ARTICLE

NO DIPHTHERIA DEATHS DURING MAY, 1931

It is with genuine pleasure not to say enthusiasm that the Diphtheria Committee is able to report that there were no deaths whatever from diphtheria in the state of Indiana during the

(Continued on page 391)

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EDITORIALS

BCG VACCINE FOR THE PREVENTION OF TUBERCULOSIS

National tuberculosis week has just passed and we have been reminded repeatedly of the fact that in one sense we are waging a losing fight in this tuberculosis business. Suppose the objective of every doctor and nurse really should become effective and that every case of tuberculosis should be taken out of the general population. Apparently the result would be most desirable, but a moment's mature consideration will remind us that it might well be of the nature of a catastrophe. If everyone in Indiana with tuberculosis were taken care of in such a way that the germs could not get to other people, and if twenty-five years of such care were exercised we would have a population with practically no immunity to the disease. In case the germs were then reintroduced—and there is no reasonable hope that all of the tuberculosis germs in the world can be destroyed—a great and disastrous epidemic would almost certainly ensue, much to the harm of the race.

As we go ahead with tuberculosis work it will become harder and harder to hold the rates down, because the population will become less and less immune. We are then in grave need of some safe method of creating a specific active immunity against the germ of tuberculosis. During the past few years we have been reading with much interest the work concerning the use of BCG vaccine (Bacillus Calmette-Guerin). This is a living vaccine made from cultures of bovine tubercle bacillus which have been grown on unfavorable culture medium for hundreds of generations, and as a result are said to have lost their virulence. The plan is to give the living vaccine in a little bit of milk to a baby by mouth on the third, the sixth and the tenth day of life. At first of course it was only given to babies born of tuberculous parents and compelled to live in the home. As is well known the mortality in such cases is very high. To date it has been given to over a million children, and the results claimed are rather striking. There are many opponents of the method in Europe, and even more in America. As a matter of fact the profession in this country may well sit back and let Europe work it out, for the reason that we have far less need of such a vaccine than do they. On the other hand, as already mentioned, we can well use some such scheme when it is all nicely worked out.

The recent Luebeck disaster with regard to BCG should not be held against it any more than the disaster with diphtheria toxin-antitoxin in South America should be held against diphtheria toxin-antitoxin. It has been shown conclusively that a mistake was made and a supposedly BCG vaccine prepared locally in Luebeck really was made from a highly virulent culture that was being kept in the laboratory. It is evident that the utmost care must be taken when handling a culture that is morphologically undistinguishable from the virulent tubercle bacillus and is to be given alive.

In the meantime the profession in this country will keep the whole matter *sub judice*, but will be wishing the brothers across the sea all kinds of good luck in the development of what may be the final K.O. punch that to date has not been arranged for by the forces fighting tuberculosis. We cannot but believe that the effort to make a vaccine which may serve as a safe means of conferring active specific immunity to our ancient enemy is working in the right direction. Whether this vaccine is the one we have been looking for remains to be seen. We ought to know in another decade.

THE A. M. A. SESSION

The Philadelphia session of the A. M. A. showed one of the largest registrations in the history of the Association, and that notwithstanding the depression. Of course it must be remembered that the populous eastern states with their large number of Fellows in the Association contributed to no small extent to the record attendance, but, on the other hand, the central and even the western states sent unusually large delegations to the session. Indiana deserves little credit for an attendance of only 77.

The convention building was wonderfully adapted to the needs of the Association, and there all of the activities of the Association were included under one roof. The technical or commercial exhibits were unusual in number and of exceptional educational merit. The scientific exhibit also was the largest ever given and merited the unstinted expressions of appreciation and praise heard on every hand.

The clinical lectures given throughout the first two days of the session were a very popular feature, and they were attended regularly by changing audiences, the total number of those participating in that feature going into the thousands. The scientific exhibits and the clinical lectures were postgraduate courses in themselves, and the Association should be commended for its endeavors to promote clinical features and educational instruction.

The sections were well attended and each and every one of them offered a splendid program of scientific papers and demonstrations. It was noted that most of these section programs utilized to the fullest extent moving pictures and stereopticon illustrations.

As to the social features it would be difficult to find entertainment more lavish and generous than that given for the entertainment of all of the visiting guests. The medical profession of Philadelphia, the municipal officers and citizens seemed to unite in an effort to see that the visitors had a good time and splendid entertainment throughout the time of the session. Philadelphia and the surrounding territory is rich in historical interest, and every effort was put forth to see that visitors were shown the historic spots.

The House of Delegates, the business organization of the Association, worked in its usual systematic and expeditious manner in considering the many and diverse problems requiring official attention. No very striking action was taken on any of the problems offered for consideration, and some of them were carried over to next year with a view to exercising better judgment in the final decision. Election of officers resulted as follows:

President-elect—E. H. Cary, Dallas, Texas.

Vice-president—George C. Yeager, Philadelphia.

Secretary—Olin West, Chicago.

Treasurer—Austin A. Hayden, Chicago.

Speaker—F. C. Warnshuis, Grand Rapids, Michigan.

Vice-speaker—Albert E. Bulson, Fort Wayne.

New Orleans was selected as the place for the 1932 session of the Association.

A NEW HOME FOR THE A. M. A.

At the Philadelphia session the Board of Trustees reported that the home of the A. M. A. at 535 North Dearborn Street, Chicago, must be enlarged to meet the gradually expanding activities of the Association, and that increase in ground space is difficult to secure in consequence of the extortionate price asked for the real estate needed. At the same time the members of the Association were extended a cordial invitation to visit the Association home and see for themselves what is being done in the interests of not only organized medicine but in the interests of the public as well insofar as the activities pertain to health education.

Every time we have visited the A. M. A. home in Chicago we have wondered why the Association ever located at 535 North Dearborn Street, Chicago, but more particularly why, after once locating there, they have continued to remain there in such a God-forsaken and undesirable place. Why shouldn't the Association have a home in one of the beautiful suburbs of Chicago where ample real estate may be secured at a fraction of what has been paid for the site at 535 North Dearborn Street, where all of the necessary future expansion could be cared for without such an enormous drain upon the treasury, where all of the other conditions which make for a large, beautiful and practical home could be met, and where all the employees of the Association could live in close proximity and under conditions that would be conducive to a pleasant home life. To our notion there is no valid reason why the Association should maintain a home in the center of a large city like Chicago, and where real estate is expensive and where surrounding conditions are far from pleasant in many respects. Certainly as good facilities may be procured in the suburbs of Chicago, and we do not believe that one feature in connection with the Association or its work cannot be maintained and carried out as well and in many instances better in a suburban home than in a restricted home in the center of a busy, dirty city like Chicago. Our Association has grown until, as one of the Trustees has said, it is practically a six million dollar concern, and its various activities require not only a large number of skilled employees but it should have facilities and working conditions that are in every way in keeping with the high character of work that is being done. Why shouldn't we procure a tract of land in close proximity to railroad and shipping facilities, where a commodious and beautiful memorial to the Association could be established, and where all of the activities of the Association could be carried on under pleasant and healthful surroundings, unhindered by the restrictions existing in the heart of the city. The esthetic features alone are worthy of favorable consideration. Think of artistic, commodious and adaptable buildings on beautiful grounds, in a reasonably quiet and healthful location on the lake front as a home for the great American Medical Association. Think of such a locality as a place of residence for the hundreds of employees of the Association! Isn't it worth thinking about, and especially when we take a squint at 535 North Dearborn Street, confined as it is in the heart of a large, noisy and relatively dirty city, where the cost of ownership and operation is tremendous to say nothing of being unnecessary.

Well, we have had our vision—and we are offering it as a suggestion to those who really desire to see the American Medical Association have a home that is in keeping with an organization that deserves the best from an esthetic as well as utilitarian sense. Last but not least it strikes us that a move such as suggested would be economical, right from the start, and certainly result in a vast saving of money in the future aside from giving the Association a home of which every Fellow could be proud.

HELPING THE SICK

Under the above title the *Indianapolis Times* discusses the increasing cost of medical care, referring especially to Evans Clark's article in the

Atlantic Monthly for October, 1930, and quoting Dr. Samuel J. Kopetzky, former president of the Medical Society of the County of New York, who emphasizes the danger of standardization and routine in the institutional control of medicine, and who very logically contends that a high degree of individuality, originality and independence is necessary to the most efficient activity of the practitioner. If the physician suffers economic injury through competition with endowed medical service, it reduces the time and attention which he can give to the free medical care of those unable to pay any fee at all. Doctor Kopetzky calls attention to the undoubted fact that the greatest burden in medical care today is not the physician's or surgeon's fee, but the charge for hospital service. The average middle class worker is able to meet the expenses arising from an illness requiring home or ambulatory treatment. It is when hospitalization and expensive nursing are required that illness imposes an unbearable burden on the middle class. The disease in this case suggests its own remedy. If hospital calls are reduced, unnecessary laboratory tests abolished, and adequate nursing made available at a price within his means, the middle class patient no longer would face economic as well as personal disaster with the advent of illness. Under the present system, with hospital and nursing charges fixed, the physician is the only one who tempers his fee to the individual case. Would not the Foundations make a vastly practical contribution to medical care if they exerted a considerable influence to reduce unnecessary overhead and employed their resources to lessen the cost of hospitalization to the middle class? There are a number of ways in which this could be done. Funds could be established in grade A institutions to assume part of the hospital, nursing and laboratory charges for patients within specified income groups, and increased contribution to the hospital as a whole could be employed to reduce fees to the entire public. Whatever the method decided on, here is a field in which the Foundations could render direct and effective assistance to the middle class when its need is urgent.

Commenting on this the *Indianapolis Times* says, "Dr. Kopetzky's exhortation well may be followed. Medical treatment demanding hospital care is the nightmare of all save the extremely rich who can afford anything, and the very poor who can make the best of charity wards. In relieving this situation the Foundation can do only good." To all of which we say "Amen"—and we desire to add that in all this hue and cry about the increasing cost of illness, the general tendency has been to make the physician "the goat" by assuming that he is the one who makes illness expensive. He probably does contribute in a measure through his gradually increasing practice of imposing upon patients a good deal of superfluous hospital and laboratory attention that must be paid for at exorbitant rates. So far as his own compensation is concerned he generally is the only one who is forced through circumstances of the patient to either reduce his bill for services rendered or perhaps donate his services altogether, while others who have anything to do with the patient receive full pay. If these Foundations created by benevolently inclined individuals would devote some time and money to the reduction of the cost of hospitalization, nursing and some other necessities in connection with the care of the sick, and refrain from heaping additional economic burdens upon the already underpaid physician, a great step in advance would be taken in making it possible for the great middle class to receive adequate attention at a cost within their means.

AMBRUSTER DECEPTION

Ambruster, who is reputed to have obtained a corner on the ergot market and was unable to realize as much financial gain as expected from it, and who blames the American Medical Association for much of his discomfiture, time and again has resorted to misrepresentation and vilification of individual medical men and medical journals in his efforts to receive some sort of recognition. Now he comes out in a black-edged card called "Truth" indicating the death of truth, on one side of which is reproduced testimony of Dr. Olin West, secretary and general manager of the American Medical Association, before a Senate committee, in which Doctor West made the statement that the American Medical Association does not deny journals published by state medical associations the right or privilege of accepting such advertisements as they choose to accept. On the other side of the card is reproduced a letter from the manager of the Cooperative Medical Advertising Bureau, sponsored by the A. M. A., but supported by state medical journals, which states that some advertising copy submitted by Ambruster is not acceptable for the state journals represented by the Bureau. In other words Ambruster, through misleading statements and deception attempts to prove that Doctor West is a liar and that the state medical journals *are* controlled by the A. M. A.

For the benefit of Mr. Ambruster, or anyone else who may be interested, we desire to say that so far as this journal is concerned the A. M. A. does not possess or exercise any authority in the acceptance or rejection of advertising. We are proud to admit that we follow the example set by the *Journal of the A. M. A.* by attempting to exclude from our advertising pages any advertising that is unethical, misleading, in bad taste or inimical to the best interests of the medical profession. Following of that policy excluded the Ambruster advertising. More recently, or since the attack on Dr. Olin West, Ambruster has launched a personal attack on Dr. Morris Fishbein, editor of *The Journal of the A. M. A.*, and

has attempted by trickery to secure condemnation of Fishbein by the officers of the A. M. A. Vilification and abuse never won any cause, and the tactics pursued by Ambruster clearly indicate the insecurity of his position in the ergot controversy.

As a mere sidelight it is known that Ambruster is spending a very large amount of money in his efforts to blacken the names of reputable medical institutions and individuals. We wonder if he alone is furnishing all the money for this campaign of vilification? We will bet a dollar against a punched nickel that he and those who sympathize with him will accomplish little by the campaign to which we refer, for they are hurting themselves more than anyone else.

THE PHILADELPHIA SESSION

(OUR SECRETARY'S IMPRESSIONS)

From a nationwide and from an Indiana viewpoint the recent session of the American Medical Association in Philadelphia was most interesting, instructive, and successful. The attendance of 7,500 was 2,500 more than generally expected. The entertainment was superfine, the historic background ideal for a medical gathering. Housed in Philadelphia's new municipal auditorium which was hurried to completion especially for the meetings, the scientific meetings, commercial and scientific exhibits were probably better taken care of than ever before in the history of the Association.

Perhaps the outstanding feature of the entire session was the scientific exhibit, while the technical or commercial exhibit was the largest in the history of the Association.

The House of Delegates devoted much attention to economic problems, the monetary as well as the scientific welfare of the individual physician being stressed throughout.

Dr. E. H. Cary, of Dallas, Texas, was named president-elect, while New Orleans was chosen as the place for the 1932 session.

So much from the general viewpoint. Now from the Indiana viewpoint. Indiana, with a registration of seventy-seven physicians, had the sixteenth largest number of men in attendance, and was much in evidence at the annual session throughout the week. The honors gained by the Indiana delegation in the House of Delegates were particularly pleasing, Dr. Frank W. Cregor, of Indianapolis, serving as chairman of the Reference Committee on Sections and Section Work, and Dr. Franklin S. Crockett, of Lafayette, president-elect of the Indiana State Medical Association, serving as a member of the Reference Committee on Miscellaneous Business. Indiana was further honored by the re-election of Dr. A. E. Bulson as vice-speaker of the House. Dr. Bulson was named over Dr. John A. Card, of New York, 83 to 63, and upon the motion of Dr. Card the election of Dr. Bulson was made unanimous. The other representatives of Indiana in the House of Delegates were Dr. R. L. Sensenich, of South Bend, and Dr. Robert M. Moore, of Indianapolis.

At the executive session Tuesday afternoon, June 9, C. B. Wright, of Minnesota, chairman of the Special Committee on Legislative Activities, made a report, a part of which read as follows: "Many of the states show by their reports evidence of great interest in this subject (legislation) and have made suggestions that require a special comment. There were some excellent reports, and I would like to mention particularly the report of the secretary of the Indiana State Medical Association. He gave us in great detail their methods of organization and of co-operation with the Bureau of Legal Medicine and Legislation. They maintain close contact with the members of Congress, have a strong tie-up with newspapers by a newspaper man who handles publicity, and keep in close contact with Dr. Woodward (director of the Bureau of Legal Medicine and Legislation of the American Medical Association)."

The following Indiana men had places on the scientific program:

Dr. E. B. Mumford, of Indianapolis, was the first essayist to appear on the program of the section on orthopedic surgery.

Dr. Albert E. Bulson, Fort Wayne, was on the program for discussion of a paper in the Section on Ophthalmology.

Dr. A. B. Graham, of Indianapolis, president of the Indiana State Medical Association, served as a member of the executive committee of the section on gastro-enterology and proctology.

Indiana was well represented also in the scientific exhibit, which perhaps proved to be the outstanding event of the Philadelphia session. Dr. Robert A. Milliken, of Indianapolis, and Dr. G. D. Scott, of Sullivan, were among the 100 physicians chosen to aid in continuous demonstrations in the exhibit on fractures. Dr. John Hays Bailey, of the James Whitcomb Riley Hospital, Indianapolis, conducted an interesting exhibit, while Thurman B. Rice, of the Indiana University School of Medicine, had an exhibit showing the distribution of disease and physicians in Indiana, which caused much favorable comment. In this exhibit Dr. Rice, following an extensive study, prepared maps showing the distribution of physicians, populations, wealth and various diseases in Indiana.

Dr. Albert E. Sterne, of Indianapolis, conducted an exhibit for the Indiana University School of Medicine on constructive neurodiagnosis and visual graphic teaching. This exhibit contained several hundred hand-colored slides showing charts of the brain and spinal cord sections. This is the third year that Dr. Sterne has given this exhibit and it proved to be one of the most popular in the entire exposition.

The commercial exhibit, the largest ever held at a medical session, showed the following Indiana

firms in attendance: W. D. Allison Company, Indianapolis; Depuy Manufacturing Company and Zimmer Manufacturing Company, Warsaw; Eli Lilly and Company, Indianapolis; Medical Protective Company, of Fort Wayne; Storz Instrument Company, Indianapolis, and the Van Camp Products Company, Indianapolis.

THOMAS A. HENDRICKS,
Executive Secretary

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

AMONG unexpected things that cause allergic skin outbreaks Dr. Cleveland White and Dr. Samuel J. Taub, of Chicago, at the Philadelphia session of the A. M. A. reported skin supersensitivity produced by buckwheat cakes, cottonseed oil, oatmeal, tomatoes, milk and chocolate.

AT the Philadelphia session of the A. M. A. a prominent layman said, "We do not need more doctors, but more *better* doctors", to which he might have added that what we need is more people who will appreciate better doctors and compensate them more adequately for the services rendered.

IF all physicians would make a trustworthy determination of the condition of the thyroid, more particularly to differentiate between hyper- and hypo-thyroidism, there would be fewer thyroidectomies, and fewer nervous people, men as well as women, for whom thyroid administration oftentimes produces marvelous results.

AT the Philadelphia session of the A. M. A. it was surprising to note how generally moving pictures and stereopticon slides were used in both the technical and commercial exhibits. Practically all of the exhibits were of a highly educational character and their popularity attested by a large attendance throughout the entire time of the session.

WE were pleased to note that in a report presented before the House of Delegates Indiana received special recognition and praise for its report on organization and activities of our State Medical Association as affects national problems. In fact Indiana was the only state mentioned, and that speaks well for our organization, and especially for our executive office.

HYGEIA is a wonderful health magazine published by the American Medical Association for the laity, and we hope that every reputable medical man in Indiana appreciates that fact and is endeavoring to increase the circulation of *Hygeia* among his patrons. One of the ways in which this can be done is for every medical man to subscribe for a copy of *Hygeia* to be put upon the table in his reception room.

THIS year's session of our Indiana State Medical Association will be held in Indianapolis, September 23rd, 24th and 25th. The program committee has made an effort to secure a program of unusual excellence, and the Committee on Arrangements already has decided upon interesting social features. There should be a large attendance of the membership. The preliminary program will be published in the August number of THE JOURNAL.

THE Philadelphia session of the A. M. A. has been considered by many to be the best session ever held. The scientific demonstrations alone were worth the time and expense of any physician who went to Philadelphia, and offered a great education in themselves, though it would be impossible to take in all the demonstrations even though the entire time of the session was devoted to that feature. The papers and addresses presented at the section meetings were uniformly of a high grade of excellence and the attendance at the section meetings was unusual.

AT the Philadelphia session of the A. M. A. a new treatment for Addison's disease was announced, and it is thought that the treatment is going to be curative in its effect. It consists in the injection of a hormone derived from the corpus or superficial part of the suprarenal gland, and is injected into the affected patient. It has been tested in many patients by The Mayo Clinic and with satisfactory results. Unfortunately the cost of the treatment is almost prohibitive, and it is hoped that in the course of time means and methods will be developed whereby the expense will be greatly lessened.

THE American Medical Association went on record in Philadelphia as desiring to protect the public from unfair, untrained and unskilled specialists, through the adoption of some sort of certificate or license that shall bear testimony to the qualifications of any physician who holds himself out as being a specialist in any line of medicine or surgery. President E. Starr Judd voiced his sentiments by saying that the people should be protected against so-called specialists who have

not had proper training. Some state medical associations, notably Michigan, are asking for the adoption of some plan of certification. We have discussed this matter in THE JOURNAL on numerous occasions during the past few years.

THE California Medical Association, at its recent annual session, authorized the creation of a permanent cancer commission to represent the Association in all phases of the organized fight upon the increasing menace of this disease. The commission plans, first, to review and bring to the attention of the profession in California the most modern methods of diagnosis and treatment of cancer, and particularly of early cancer. Later efforts will be directed toward education of the lay public on the signs and symptoms suggestive of early cancer. This is a worth-while project and should receive the support and encouragement of the California profession. California should be congratulated for her progressiveness in this field.

IN one of our Indiana cities tonsil and adenoid operations are being performed in one of the city school buildings, the little patients being returned to their homes soon after recovering from the effect of the anesthetic. Turning school buildings into hospitals is something new and we can't quite understand why the regular hospitals, properly equipped for operative work, should be shunned, even if the work belongs to the charity class. Of course if the public school buildings are to be equipped with operating rooms, detention rooms, nurses, and fully prepared to care for operative cases, even if complications arise, perhaps no criticism is in order. However, we can't quite understand why the public schools should enter into competition with the hospitals.

IN the May issue of THE JOURNAL we made a statement to the effect that Dr. Frances T. Brown, of Indianapolis, would be the first woman interne in any of the Indianapolis hospitals, but we find that this idea was in error. Dr. Marie Kast, of Indianapolis, held the first interneship at the Robert W. Long Hospital in 1914, and was followed by Dr. Mollie King (deceased). Others followed at that hospital, St. Vincent's Hospital and the Methodist Hospital. We would not intentionally publish an untrue statement, but occasionally we find that dependence upon the veracity of newspaper items misleads us. However, we reiterate our praise of the woman physician who so desires to be thorough and competent that she will undertake an interneship on the same basis, with no more consideration or favors than granted to male internes.

A SURGEON of our acquaintance says that in connection with this hue and cry about the increasing cost of illness, it is high time to offer some criticism concerning the inconsistent and exorbitant charges made by hospitals for trivial and sometimes unnecessary service. He says that one of his cases after being in the hospital a few days received a bill of $12.80 for extras which included a Wassermann, blood count, and medicine. When asked to itemize the unauthorized account for extras, the information was obtained that two doses of elixir of cascara sagrada had been charged at $2.40. There is no excuse for that sort of extortion, and despite the fact that physicians say they get "in bad" with the hospital if they offer any complaints on behalf of the patient, it is time that something be done to correct the condition.

TEN principal causes of death in Indiana for 1930:

	DISEASES	TOTAL DEATHS
1.	Organic Heart Disease	6,160
2.	Cerebral Apoplexy	3,631
3.	External Causes (Accidental, Homicide and Suicide)	3,522
4.	Cancer	3,399
5.	Pneumonia	2,818
6.	Accidental	2,660
7.	Bright's Disease	2,606
8.	Tuberculosis (all forms)	2,136
9.	Automobile Injuries	1,146
10.	Influenza	684

In 1921, ten years ago, deaths from automobile injuries ranked 18th in total deaths. In 1930, it will be noted, deaths from automobile injuries occupied 9th place.

A TOTALLY blind man being led by a dog through the congested pedestrian and automobile traffic was an interesting sight beheld while attending the Philadelphia session of the A. M. A. The dog exhibited all the intelligence of an individual seeking the safest way, and the blind owner of the dog remarked that he sometimes thought that the dog really knew the color of the traffic signs for he seemed to stop instinctively when the red light indicated a stop. Many interesting things were learned about the invaluable services rendered by the dog as a guide, and we well can understand why the blind man said, "He is my eyes". Fortunately, blind people are able to procure trained dogs at an expense from $700 to $1,000, and a wealthy benevolent gentleman has agreed to pay any excess over $300 for trained dogs for those unable to pay the regular price. Considering that it takes seven months of daily training to fit a dog to be the eyes for a blind person, the price seems reasonable.

THE food faddists received a terrible tongue-lashing at the Philadelphia session of the A. M. A. and they deserved it. The American people are notorious in their fondness for fads of every kind, and the food manufacturers and the so-called food experts have taken full advantage of the situation and are profiting at the expense of the dear public. Nearly every mother nowadays is talking abou

calories and vitamins in the diet of the household and particularly the kiddies. Their lives are made miserable by studying diet rules, and the Lord knows that they probably are made miserable in consequence of the result. What we need is to instill into the minds of the people a little common sense concerning this question of diet, and an especial effort should be made to counteract the fallacious teaching of so many fool food experts who are proselyting for manufacturers and the commercial interests and making fools of the people who listen to them. The teaching of the reputable members of the medical profession has been invaluable insofar as acquainting the public with new and important discoveries concerning foods and their actions, but the so-called food experts in the employ of commercial concerns have gone a mile further and spoiled all the effects.

LIKE everyone else the physician is hit by the financial depression, and he has been hit hard. We can be busy enough taking care of the ills of humanity, but it is quite another thing to get paid for our services. Those physicians who have exercised some business ability in the past and pursued business-like methods in effecting collection of amounts due from patrons may have accumulated some savings that are a source of great satisfaction and comfort right now, whereas the easy-going, unbusiness-like physician who has paid little attention to his collections is really suffering, and he finds it difficult if not impossible to maintain any kind of personal credit. The banks have squeezed everyone, and in fact actually have aided in keeping up the depression and feeling of uneasiness, so medical men have fared no better than anyone else in getting bank credit, and there is a limit to the credit that can be extended by merchants. Undoubtedly this situation has merit in one respect, and that is it will teach a whole lot of people, physicians included, to be economical, frugal, and to save. It certainly should teach physicians that they ought to utilize business methods in the practice of medicine by using all honorable means of collecting what is due for professional services rendered while at the same time being always careful to extend leniency where leniency is due.

WE have heard many unfavorable reports from members of our Association which justify us in warning physicians to think twice before buying cheap accident or indemnity insurance of any kind. The glib salesman or insurance agent may tell you that he is saving money for you, and perhaps he is at the time, but wait until you desire to recover on your policy and see what happens. We always have been and we always will be of the opinion that in the long run it is cheaper to buy the best of anything within reason even though it costs a little more. Some of our members have been sadder but wiser men as a result of pinning their faith to a protection policy of some kind that was represented as offering an opportunity to save money. Most of these companies are assessment companies, though some of them have been stock companies of recent origin or existing for years as small and poorly managed concerns. Another point of importance is to purchase protection insurance of any kind from an established and reputable local agency which takes pride in its reputation for integrity and established record of giving patrons satisfactory service. Whenever you find an insurance or indemnity company quibbling over technicalities to avoid paying a claim, it would seem that such company is one to be crossed from the list of those to whom you desire to entrust patronage.

WE have just had the unusual experience of having a patient ask for a duplicate prescription to be given to friends and acquaintances. The patient was frank enough to state why the prescription was requested. Needless to say, the opinion was given that what is good for the goose is not always good for the gander, and that under any circumstances self-prescribing is a dangerous proposition. As a mere side issue, it may be noted that although a prescription carries with it definite instructions that it is not to be refilled except under the authority of the physician, yet few if any druggists ever pay any attention to the request. Self-prescribing is an evil that is growing, and physicians are helping it along by telling patients what to procure at the drug stores and the dosage and intervals at which the medicine should be taken. Physicians also are helped along in self-prescribing by having their prescriptions filled and refilled, and copies of the prescription distributed sometimes to dozens of people who may or may not be injured or benefited by taking a preparation not intended for them. The drug-dispensing physician has been frowned upon by the high-brows in our profession, but somehow or other we have a growing respect for him in view of the fact that he not only knows what he is prescribing and using upon his patients, but he also knows that he is not aiding patients in the dangerous practice of self-prescribing.

TO some industrial insurance companies all physicians and all medical and surgical service look alike. In consequence little or no discrimination is made as to the kind or quality of service rendered or who renders it. The quality of the service seems to be of secondary consideration, and the total expense the most important feature in the adjustment of the claim. The medical man, whether he be surgeon or general practitioner, often is called upon to reduce his regular fees, and sometimes is emphatically told that his very reasonable request for just remuneration is extortionate and will not be considered. The truth of the matter is that a few compensation insurance companies, sometimes through the influence of arrogant, dictatorial managers or claim agents,

adopt the plan of offering complaint concerning the size of any and all bills rendered for professional services, and not infrequently succeed in browbeating the physician into accepting a compromise rather than go to the trouble and expense of filing a claim before the industrial commission or elsewhere. Certainly there is room for some constructive work on the part of the medical profession and the labor unions in securing legislation that will protect both in efforts to give the workingman the very best attention obtainable when he is injured. If the insurance company is permitted to dictate unfairly as to compensation that shall be paid for professional services, which as a rule ought to be of the most approved type in these industrial accidents, it is a foregone conclusion that eventually the better men not only will refuse to do industrial work, but the injured employees will not receive what is coming to them. This matter is something that is of just as much interest to members of labor unions as it is to members of the medical profession, and we earnestly hope that combined action may result in correcting the abuses that exist at the present time.

RECENTLY we met a country doctor ninety years of age who was very justly proud of the fact that he still was practicing medicine every day, as he had been for the previous sixty-five years. When asked by a lay newspaper reporter, who happened to be near, as to the reason for long life and good physical condition the old doctor replied: "All my life I have practiced moderation in all things. However, that has not prevented me from eating, drinking, and smoking as I liked, and it has not prevented me from following within reason pleasant avocations. I love the great outdoors, and I have spent considerable time in fishing, hunting, boating, and horseback riding, but none of those recreations have interfered with the practice of my profession for periods longer than one week. I suppose that some of my professional brethren consider me a heretic, for I give little medicine, and I look upon many of the operations commonly performed as superfluous and unnecessary. Many of my patients get well under the influence of thoughtful advice as to elimination and habits of life, and I feel that I have accomplished as much by such means in a large percentage of my cases as I would had I prescribed a lot of drugs. Under the tutelage of my preceptor, and later in medical college, I learned to use intelligently about a half dozen very potent drugs, and I have at all times found those drugs quite sufficient to produce the results desired by me. There are, of course, newer remedies like antitoxin for diphtheria, that have come into use since I began the practice of medicine, and I have learned to appreciate their value, but for the most part I still stick to the old, well-trusted remedies of proven value the use of which I learned in early days. Some of my patients are nearly as old as I am and have been under my care for many years. On the whole I would say that my results have been satisfactory, and I have been as generally successful as physicians of the younger generation who have had more and better opportunities. Perhaps some of my success may be due to the exercise of good common sense, for I know of confreres who have made failures in the practice of medicine because they did not utilize the brain that the all-wise Creator gave them. I do not discredit the newer efforts, and the new means offered for the alleviation of disease and suffering, but I do say that some of the younger men have failed to evaluate the good that is in some of the older methods and older means with which I first began the practice of medicine."

THE following Indiana physicians registered at the Philadelphia session of the American Medical Association:

Monday, June 8:

David A. Bickel, South Bend; G. B. M. Bower, Fort Wayne; John Herschel Bowles, Muncie; Albert E. Bulson, Fort Wayne; Raymond A. Butler, Beech Grove; Emor L. Cartwright, Fort Wayne; S. M. Casey, Huntington; Frank W. Cregor, Indianapolis; F. S. Crockett, Lafayette; Alfred Ellison, South Bend; R. L. Gensenick, South Bend; Gerald W. Gustafson, Indianapolis; Sidney J. Hatfield, Indianapolis; S. N. Havice, Fort Wayne; C. C. Herzea, Evansville; John W. Hilbert, South Bend; Frank E. Hill, Muncie; George R. Jewett, Wabash; Arnold L. Lieberman, Gary; E. Oscar Lindenmuth, Indianapolis; Harold D. Lynch, Evansville; Martha Brewer Lyon, South Bend; Marcus Ward Lyon, Jr., South Bend; Desmond F. McGuire, East Chicago; S. E. Mentzer, Monroeville; Robert M. Moore, Indianapolis; Thurman B. Rice, Indianapolis; Simon P. Scherer, Martinsville; G. D. Scott, Sullivan; Albert E. Sterne, Indianapolis; J. H. Warvel, Indianapolis; Fred B. Wishard, Anderson; Marion D. Wygant, Mishawaka.

Tuesday, June 9:

E. O. Alvis, Indianapolis; Don D. Bowers, Huntington; Arthur E. Burkhardt, Tipton; W. W. Duemling, Fort Wayne; F. W. Dunn, Muncie; B. W. Egan, Logansport; H. W. Gante, Anderson; A. S. Giordano, South Bend; Franklin E. Hagie, Richmond; Thomas A. Hendricks, Indianapolis; W. F. Hughes, Indianapolis; Hugh A. Kuhn, Hammond; Vincent A. Lapenta, Indianapolis; Edwin L. Libbert, Lawrenceburg; J. R. Logan, Evansville; Ralph R. Ploughe, Elwood; M. Ravdin, Evansville; B. W. Rhamy, Fort Wayne; J. W. Ricketts, Indianapolis; N. A. Rockey, Fort Wayne; Morrell Simpson, Bedford; Chester A. Stayton, Indianapolis.

Wednesday, June 10:

Donald A. Bartley, Indianapolis; Raymond R. Calvert, Lafayette; Thomas J. Dugan, Indianapolis; Russell Hippensteel, Indianapolis; Edwin N. Kime, Indianapolis; Harold G. Martin, Lafayette; Adah McMahon, Lafayette; Henry O. Mertz, Indianapolis; Milo K. Miller, South Bend; Arvine

E. Mozingo, Indianapolis; W. R. Morrison, Kokomo; Rollin H. Moser, Indianapolis; Willard A. Price, Nappanee; Chas. S. Stewart, Auburn; A. J. Whallon, Richmond; Matthew Winters, Indianapolis; L. G. Zerfas, Indianapolis.

Thursday, June 11:

James A. Dugan, South Bend; Edward H. Kruse, Fort Wayne; Murray Maywood Sears, Elkhart; John T. Short, Fort Wayne.

DEATH NOTES

R. J. PANTZER, M.D., of San Antonio, Texas, died June 6th. He was the son of Dr. and Mrs. H. O. Pantzer, of Indianapolis.

CHARLES LADD, M.D., of Cannelton, died recently. Dr. Ladd was 74 years of age. He graduated from the University of Louisville School of Medicine in 1882.

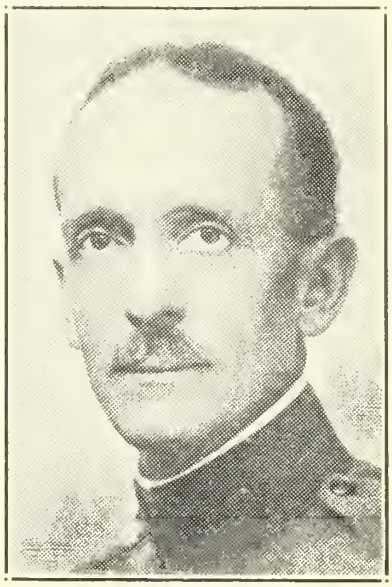
JAMES THOMAS CLARK, M.D., of Hammond, died June 30, aged 70 years. Dr. Clark had retired from the active practice of medicine. He graduated from the University of Louisville School of Medicine in 1882.

PERRY G. MOORE, M.D., pioneer physician of Wabash County, died June 9th, aged 86 years. Dr. Moore had practiced medicine in Wabash county since 1866. He had retired from the active practice of medicine and was living with his son in Huntington at the time of his death. Dr. Moore graduated from the Cincinnati College of Medicine and Surgery in 1866. He was a member of the Wabash County Medical Society, the Indiana State Medical Association and the American Medical Association.

LEWIS PARK DRAYER, M.D., prominent Fort Wayne physician, died at the Battle Creek Sanitarium, Battle Creek, Michigan, June 24th, following an illness of several weeks.

Dr. Drayer was born in Hartford City, May 4, 1870. He attended public schools in Hartford City, later attended Hanover College, where he took his pre-medic course. He graduated from the Fort Wayne College of Medicine in 1895, since which time he has practiced in Fort Wayne.

Dr. Drayer was the first health officer appointed in Fort Wayne, 1895. He founded the first bacteriological laboratory in the city which is regarded as one of the best in Indiana. He served as secretary of the Fort Wayne Board of Health in 1917, following which he enlisted in the medical corps of the U. S. Army. He was commissioned a major and served at base hospitals in France during the war and at Coblentz after the Armistice was signed. Following his discharge from the Army in 1919 he again took up his practice in Fort Wayne, served on the Board of Health from 1922 to 1925, and also was appointed a member of the school board, and in connection with this work he formulated plans for a school for handicapped children, which school opened this year.



DR. L. PARK DRAYER
—Courtesy Fort Wayne *News-Sentinel*

Dr. Drayer conducted a general practice, but was interested particularly in diseases of children, and reported that he had delivered more than five thousand children. He was professor of pediatrics in the Indiana University School of Medicine, at Indianapolis, and was a member of the Fort Wayne Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association, and a member of the Central States Pediatric Society.

Dr. Drayer's prominence was not confined to the city of Fort Wayne, for he was widely known and loved by many throughout the state of Indiana.

ALBERT EUGENE STERNE, M.D., of Indianapolis, died suddenly, June 30th, at the home of his brother in Denver, Colorado, where he had gone for a visit. Heart disease, from which he had suffered for several years, caused his death.

Dr. Sterne was a widely known specialist on nervous and mental diseases, and for many years was the operator of the Norways Sanatorium for the treatment of nervous and mental diseases in Indianapolis.

Dr. Sterne was born in Cincinnati, April 28, 1866. He received his secondary education at Mt. Pleasant Military Academy in New York, then attended Harvard University, following which he spent six years in Europe and graduated from Friedrick-Wilhelms Universitat, Berlin (University of Berlin), in 1891. Dr. Sterne went to Indianapolis in 1893 and became professor of nervous and mental diseases in the old Central

College of Medicine and after it became the Indiana University School of Medicine he continued as head of the department. Dr. Sterne organized the Norways Sanatorium in 1898.



DR. ALBERT E. STERNE
—Courtesy Indianapolis *News*

Dr. Sterne was active in medical research work and contributed much to the field of medical literature. He was for several years editor of the *Medical Monitor* and an associate editor of the *Journal of Nervous and Mental Diseases.*

Dr. Sterne was appointed assistant surgeon-general of Indiana by Governor Winfield T. Durbin. He was a member of the Mississippi Valley Medical Association, the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

DR. CARL M. DAVIS, of Valparaiso, and Miss Leona Helen McNiece, of Valparaiso, were married June 5th.

DR. BYRON K. RUST, of Indianapolis, and Miss Angelyn Cunningham, of Indianapolis, were married June 30th.

DR. MURRAY DEARMOND, and Miss Bonnie Kathleen Moffett, of Indianapolis, were married at Greencastle, May 27th.

DR. CLARK W. DAY, of Indianapolis, has announced that his new location will be at 611 Bankers Trust Building.

THE Federal Food and Drugs Act, popularly known as the Pure Food Law, was twenty-five years old, June 30, 1931.

DR. J. R. MCLAUGHLIN, of Indianapolis, and Miss Lorene Englehardt, of Evansville, were married June 10th, in Indianapolis.

THE Indianapolis Medical Society held its fourth annual picnic at the Polk Sunlight Dairy Farm at Greenwood, Indiana, June 24th.

THE 1932 session of the American College of Physicians will be held at San Francisco, with headquarters at the Palace Hotel, April 4th to 8th.

AT the July 2nd meeting of the Jay County Medical Society, at Portland, Dr. Larue Carter, of Indianapolis, presented a paper on "Muscular Dystrophy."

THE Orange County Medical Society met at Orleans, June 9th. Dr. W. F. King, secretary of the Indiana State Board of Health, addressed the meeting.

THE Noble County Medical Society met with the Drs. Luckey at Wolf Lake, June 29th. The meeting was devoted to case reports and presentation of clinical cases.

DR. EDWIN N. KIME, of Indianapolis, was elected president of the American Physical Therapy Association at the meeting of that society recently in Philadelphia.

DR. JOHN H. GILPIN, of Fort Wayne, was elected commander of the Indiana Department of the Veterans of Foreign Wars, at the annual state meeting held in Connersville, June 13th.

THE Jay County Medical Society held a meeting at Portland, June 5th. Dr. F. E. Keeling and Dr. A. C. Badders presented talks on "The Medical Abdomen" and "The Surgical Abdomen."

THE Perry County Medical Society held a meeting at Tell City, June 2. Miss Hall and Miss Thomas, of the Indiana State Board of Health, presented a discussion of an immunization campaign.

THE Laporte County Medical Society met at Laporte, May 21, at the Rumley Hotel. Dr. H. O. Mertz, of Indianapolis, was the principal speaker, his subject being "Urologic Conditions Found in Children."

DR. E. T. THOMPSON, administrator of the Indiana University Hospitals at Indianapolis, was elected president of the Indiana Hospital Association at the annual tri-state meeting held in Chicago recently.

DR. W. A. ALLEN, of Rochester, Minnesota, aged ninety-seven years, was given an honorary

degree of Master of Science by Franklin College recently. Dr. Allen attended Franklin College seventy-eight years ago.

MEMBERS of the Madison County Medical Society were guests at a meeting of the Grant County Medical Society held in Marion, June 17th. Dr. B. R. Kirklin, of Rochester, Minnesota, was the principal speaker.

DR. E. L. CARTWRIGHT, of Fort Wayne, attended the meeting of the American Medical Association in Philadelphia, and also the annual meeting of the American Proctologic Society, to which he was elected an associate member.

A RESOLUTION of congratulations has been extended by the members of the Sixth District Medical Association to Dr. William H. Larrabee, of New Palestine, as the only physician in the United States to be elected to Congress in the last election.

OFFICERS of the Elwood Medical Society were elected at the meeting held June 9th. Dr. Harry W. Fitzpatrick was made president, Dr. G. F. Harrold vice-president, and Dr. W. A. Laudeman secretary-treasurer. This society will hold no more meetings until October.

DR. WILLIAM A. DOEPPERS, for five years superintendent of the Indianapolis City Hospital, has resigned to take a position in the medical research department of Eli Lilly and Company. The change will be effective August 1st. Dr. Charles W. Myers has been named to succeed Dr. Doeppers.

THE Indiana Roentgen Society met at Lafayette, June 15th, at the Lafayette Country Club. Interesting films were discussed, and in the evening members of the Tippecanoe County Medical Society were guests at dinner, following which Dr. B. R. Kirklin, of Rochester, Minnesota, presented an illustrated address.

DR. JEROME V. PACE, of Lima, Ohio, has been made superintendent of the Indiana State Tuberculosis Hospital at Rockville. Dr. Pace resigned as superintendent of the Lima District Tuberculosis Hospital in order to accept the new position. Dr. Pace will succeed Dr. Amos Carter, of Indianapolis, who resigned last December.

THE members of the Rush County Medical Society and the Shelby County Medical Society held a joint meeting at the Manilla Christian Church, June 3. Dr. Thurman B. Rice, of Indianapolis, presented a paper. There also was a short address by Dr. William H. Larrabee, of New Palestine, followed by a program of music. The public was invited to attend the meeting.

Fortville physicians were hosts to members of the Hancock County Medical Society at its meeting, June 4th. The meeting consisted of a program in the afternoon, a banquet, and an evening meeting, to which the public was invited. At the evening meeting Dr. Frank W. Cregor, of Indianapolis, talked, his subject being, "What the Family Doctor Can Do for You."

THE Sixtieth Annual Meeting of the American Public Health Association will be held in Montreal, Canada, September 14-17, with headquarters at the Windsor Hotel. In addition to the regular section programs, special sessions will be devoted to rural sanitation, health education and diphtheria immunization. A three-day post convention tour to Quebec and the Saguenay river is being planned as an all expense trip by steamer from Montreal. Reduced railroad fares on the identification certificate plan have been authorized by the Passenger Association of the United States and Canada.

IN accordance with an agreement between the New York Post-Graduate Medical School and Hospital and Columbia University, effective July 1st, the former became the Post-Graduate School of Medicine of Columbia. An administrative Board of Post-Graduate Studies in Medicine has been established by President Nicholas Murray Butler, on which will be represented members of the governing body of the University, the undergraduate medical school and the postgraduate school of medicine. This Board will have general oversight and control of all postgraduate instruction in medicine offered by the University, whether at the Medical Center, the Post-Graduate Medical School or elsewhere in the city.

THE Ninth District Medical Society held its annual meeting at the Elks' Home and Ulen Country Club, Lebanon, May 28th. Attica was chosen as the meeting place for next year. The following officers were elected: A. C. Holley, Attica, president; V. L. Turley, Fowler, vice-president; A. R. Kerr, Attica, secretary-treasurer. J. C. Romberger, of Lafayette, was made district councilor for a three-year term. The Boone County Medical Society was host for the meeting. Guest speakers included Dr. L. N. Segar, Indianapolis; Dr. D. P. Hall, Louisville; Dr. L. Ray Ellers, Louisville; Dr. F. P. Hunter, Lafayette; Dr. A. R. Barnes, Rochester, Minnesota. A motion picture on "Traumatic Surgery of the Extremities" was shown following the program. In the evening Mr. Albert Stump, of Indianapolis, addressed the members on "Some Legal Obligations of Professional Men." More than one hundred guests attended the banquet in the evening.

THE Thirty-seventh Annual Conference of County, City and Town Health Officers with the

State Board of Health will be held in Indianapolis Tuesday and Wednesday, September 22 and 23. Conference Headquarters will be at the Claypool Hotel, with the first session of the conference beginning at 9 a. m., Tuesday, September 22. Under the law health officers are required to attend the conference when summoned by the State Board of Health, with necessary expense incurred paid by counties, cities and incorporated towns. The attendance at these annual conferences usually exceeds 250 and since the conference this year is to be held in Indianapolis the attendance should be large. The Health Officers' Conference is held immediately preceding the annual session of the Indiana State Medical Association, which will be held this year in Indianapolis, beginning on the evening of September 23 and continuing through September 24 and 25. A splendid program is being arranged for the conference.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Hixson Laboratories, Inc.:
Rabies Vaccine (Hixson).

Lederle Laboratories, Inc.:
Concentrated Pollen Antigen (Lederle) Ragweed Combined.
Diphtheria Toxin for Schick Test in Peptone Solution.

Eli Lilly & Co.:
Diphtheria Toxoid-Lilly.
Syrup No. 112 Ephedrine Hydrochloride.

Chas. Pfizer & Co.:
Calcium Gluconate-Pfizer.

Spicer & Co.:
Quiniobine.
Quiniobine Ampules, 2 cc.

E. R. Squibb & Sons:
Grasses Combined Pollen Allergen Solution-Squibb.
Cottonwood Pollen Allergen Solution-Squibb.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1930, p. 477):

Hixson Laboratories, Inc.:
Diphtheria Antitoxin.
Tetanus Antitoxin.

INDIANA UNIVERSITY NEWS NOTES

DR. EDWIN N. KIME, Indiana University School of Medicine instructor and director of the department of physical therapy at the Robert W. Long and City Hospitals, has been elected president of the American Physical Therapy Association. He was elected at a meeting of the association in Philadelphia the early part of June.

THE Ravdin medal, which is given by Dr. M. Ravdin, of Evansville, each year to the member of the senior class of the School of Medicine at Indiana University who makes the highest average in the four-year course for the M.D. degree, was awarded this year to Arthur B. Richter, Flora. He received the A.B. degree from I. U. in 1925 and the M.D. degree this year.

DR. WILLIAM E. HEALY, senior interne at St. Vincent's Hospital, Indianapolis, will be official physician for the Indiana boys' caravan on its tour of the southwest this summer. Doctor Healy was graduated from Indiana University School of Medicine in 1929. The caravan will leave July 2nd for Arizona and Mexico, visiting twelve states en route, and will return to Indianapolis August 20th.

DR. JOHN R. HURLEY, graduate of the Indiana University School of Medicine, has been named resident physician at Ball Memorial Hospital, Muncie. He will succeed Dr. Russell E. Phillips, resident physician for the past year. Doctor Phillips will do active practice at Warsaw. Following his graduation from Indiana University Doctor Hurley did service at St. Joseph's Hospital, Fort Wayne.

MEMBERS of the faculty and executive council of the Indiana University School of Medicine at Bloomington were guests of honor at a banquet and dance sponsored by the Skeleton Club May 29th. The affair was held in the Student Building Auditorium, with Ralph E. Blackford, Middletown, Ohio, president of the Skeleton Club, in charge. Joseph West, Indianapolis, acted as toastmaster for the occasion.

MEDICAL and pre-medical students of Indiana University at Bloomington were given an opportunity to see the various processes which take place in the manufacture of pharmaceuticals, biologicals and research work which were shown in a motion picture this summer. The picture was entitled "The Romance of the Drug Industry" and was released by the Eli Lilly Pharmaceutical and Drug Company of Indianapolis.

DR. EDWARD T. THOMPSON, administrator of the Indiana University School of Medicine, Indianapolis, has been named president of the Indiana Hospital Association for the year 1931-32. Doctor Thompson will succeed Dr. William Doeppers, who is superintendent of the Indianapolis City Hospital. Other officers of the organization are Edward Rowlands, assistant administrator of the University Hospitals, vice-president, and Gladys Brandt, superintendent of the Cass County Hospital, executive secretary.

DURING the month of May this year the Indiana University hospitals at Indianapolis served a total

of 1,908 patients. Six hundred and eighty-one were bed patients while the remaining 1,227 were out-patients. The James Whitcomb Riley Hospital came first with 926 patients (262 bed patients and 664 out-patients). The Wm. H. Coleman Hospital for Women came second with 516 patients (242 bed patients and 274 out-patients), while the Robert W. Long Hospital came third with 466 patients (177 bed patients and 289 out-patients). The combined patient daily average for the three hospitals was 404.47.

THE students receiving the Doctor of Medicine degree, *cum laude*, were as follows: G. T. Bowers, Fort Wayne, graduate residence, Methodist Hospital, Indianapolis, 1929-30; thesis, Jejunostomy (B.S., Ohio Northern University, 1927; M.D., Indiana University, 1929). George A. McDowell, Logansport, graduate residence, Methodist Hospital, Indianapolis, 1930-31; thesis, The Physiology of Menstruation (B.S., Indiana University, 1927; M.D., 1930). Ernest L. Mock, Huntington, graduate residence, Indiana University Hospitals, Indianapolis, 1930-31; thesis, Eclampsia and Preeclampsia (LL.B., Hamilton College of Law, 1922; B.S., Indiana University, 1928; M.D., 1930).

ONE hundred and two students received the Doctor of Medicine degree at the 102nd annual commencement exercises of Indiana University, held June 15th. In addition to 102 receiving the Doctor of Medicine degree, three received the M.D. degree *cum laude*. Forty-eight students received the B.S. degree in medicine, nineteen the graduate nurse degree, and thirty the Doctor of Dental Surgery degree. The 1931 I. U. graduating class numbered approximately 950 members. A total of 705 of these were granted degrees at the June 15th commencement exercises and the remaining 250 will receive their degrees in October, after they have completed a few remaining hours of credit during the summer term.

DR. ARNOLD H. MALONEY, who was graduated from the Indiana University School of Medicine in 1929, and who has been doing research work for the past two years in the laboratories of the University of Wisconsin, received the Ph.D. degree from that institution this June. In addition to being a fellow of the General Education Board, he was made an honorary scholar of Wisconsin. He worked at Wisconsin under a grant from the General Education Board. From Wisconsin he will go to Washington, D. C., this September to take charge of the department of pharmacology in the Howard University School of Medicine in that city. Doctor Maloney has written a number of scientific publications on the action of morphine and has discovered an antidote for acute poisoning by members of the barbituric group of hypnotic drugs.

DR. JOHN HAYS BAILEY, engaged in research work under the Louis C. Huesman Foundation and the Indiana University School of Medicine, gave an exhibit on the pathology of whooping cough and statistics bearing on the disease to the American Medical Association meeting in Philadelphia June 8th-13th. Doctor Bailey's exhibit contained lantern slides and other methods of illustrating the mortality rate among children suffering from whooping cough in rural districts, classified according to ages. He also exhibited the results of certain experiments in animals, these exhibits covering his findings over the period of two years in which he has been engaged in investigation of the causes and effects of whooping cough. Doctor Bailey's experimental work has been carried on in connection with the James Whitcomb Riley Hospital for Children.

ELECTION to Alpha Omega Alpha, honorary medical scholarship society, was won by the following Indiana University medical students at the close of the school year:

Seniors—William E. Barnett, Logansport; Margaret F. Benjamin, Thiells, New York; Frances T. Brown, Indianapolis; Clyde G. Culbertson, Vevay; Charles H. Denzler, Jeffersonville; Herbert S. Dieckman, Evansville; Donald C. Emenhiser, New Haven; Frank Furstenberg, Indianapolis; Dillon D. Geiger, Bloomington; Gayle J. Hunt, Richmond; Leo E. Jordan, Indianapolis; Emmett B. Lamb, Amboy; Ernest C. McDonald, Indianapolis; Ardis Melloh, Indianapolis; John W. Oliphant, Fort Branch; Edward S. Post, South Bend; Arthur B. Richter, Flora; Ralph D. Shaner, Fort Wayne; John C. Volderauer, Evansville.

Juniors—Charles K. Ingersoll, Indianapolis; Stephen L. Johnson, Richland; Kenneth G. Kohlstaedt, Indianapolis; Amos C. Michael, Fremont; David G. Pugh, Indianapolis; John D. Ralston, Redkey; Brandt F. Steele, Indianapolis; George W. Wright, Evansville.

NO DIPHTHERIA DEATHS DURING MAY, 1931

(Continued from page 378)

month of May. Since last year during the same month there were four deaths, this now enables us to overcome the small increase that occurred last month. As a result of the fact that there were no deaths last month, we are able to report that for the first five months of the year there were three deaths less than that of the corresponding time last year. This enables us to look forward to the establishment of another new low record for diphtheria deaths in Indiana for the year 1931. Particularly commendable is the record which southern Indiana has made so far. There have been very few deaths in that part of the state and also very few cases.

(Continued on next page)

Interesting is the fact that although the deaths are under the number for last year, the number of cases reported is considerably greater. In our opinion this means that the cases are being reported better than they were last year. It is impossible to emphasize too strongly the importance of early diagnosis and reporting of all cases of diphtheria. Without accurate case reports it is impossible for the health authorities to know where they stand in regard to diphtheria.

Below is given the counties which have already had diphtheria deaths this year and we are very glad that the fact that there were no deaths during this month enables us to reproduce the list as given last month:

County	Total for 1931	County	Total for 1931
Allen	2	LaGrange	1
Bartholomew	1	Lake	5
Brown	1	Laporte	1
Carroll	1	Lawrence	2
Clark	2	Madison	5
Dearborn	2	Marion	1
Delaware	2	Marshall	1
Fayette	2	Martin	1
Franklin	2	Montgomery	1
Gibson	1	Newton	1
Grant	2	Orange	1
Green	1	Ripley	3
Hamilton	1	Starke	1
Henry	1	Vanderburgh	1
Howard	2	Vigo	1
Huntington	1		
		Total	50

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

May 19, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held April 28 read and approved.

Newspaper release for publication May 23, "Scarlet Fever."

Newspaper release for publication May 25, "Secretaries' Conference."

Radio release, May 9—"Prenatal Care" for Child Health Week program. May 16—"Keep Your Eye on the Ball."

Request for speaker:

Request for speaker received from the president of the Woman's Auxiliary to the Indiana State Medical Association asking the Bureau to suggest the name of some Indiana man or physician who can make a talk to the members of the Auxiliary at their annual meeting which is to be held Thursday morning, September 24, during the annual session of the Indiana State Medical Association.

Reports on medical meetings:

March 17—Tri-County Medical Society, Columbus, "Focal Infections."

May 1—Howard County Medical Society, Kokomo, "Problems in Lung Diagnosis and Treatment."

A clipping from *The Indianapolis Star* of Sunday, May 10, in regard to a "miniature hospital" installed in the Illinois Building for employees was brought to the attention of the Bureau of Publicity. The Bureau referred the matter to the State Board of Medical Registration and Examination as the newspaper article did not make it clear as to whether a physician was in charge. The State Board wrote the following letter to those in control of the hospital:

"My attention has been called to the notice of the establishment of a hospital in the Illinois Building, Indianapolis, Indiana.

"I would call your attention to the provisions of the medical practice act of this state, which specifies that any treatment of human ailments must be under the direct and immediate supervision of a licensed physician, except in the case of emergencies or first aid. The law does not contemplate that a nurse may assume the duties and responsibilities of a physician.

"You are also reminded that unless your nurse in charge is a registered nurse, she will be amenable to the law governing the registration of nurses.

"Your plan is commendable but it is hoped that you will keep within the provisions of the medical practice act, and give no cause for complaint to this office of violation of the law."

A report which appeared in the *New York Times* on April 14 and was carried in a bulletin issued by the American Pharmaceutical Manufacturers Association was brought to the attention of the Bureau. This bulletin contained a plan by S. M. Gordon, M.D., secretary of the Council on Dental Therapeutics of the American Dental Association, to control the local sale of patent medicine and is endorsed by Health Commissioner Shirley W. Wynne, of New York. The plan recommends the revision of the sanitary code of New York state so as to prohibit or regulate the sale of certain classes of drugs such as alleged cures for cancer, tuberculosis, asthma, weight reducers and contraceptives. "The exploitation of patent medicines," Dr. Gordon points out, "is carried on largely through newspaper and magazine advertising". Doctor Gordon recommended that the Health Department sponsor meetings of representatives of the publication and the department "to effect a closer working relation to the end that medical advertising will be submitted to the department for comment." The Bureau is of the belief that Dr. Gordon's recommendations are most encouraging.

The following letter was received from the Director of the Division of Infant and Child Hygiene of the State Board of Health:

"I am enclosing a tentative program of the Winona Lake Child Health Week which is conducted each year by the Child Hygiene Division of the State Board of Health.

"We have decided this year to devote the last three days, July 9, 10, and 11, to a Northern Indiana Conference on Child Health and Protection similar to the Indiana Conference.

"The American Medical Association is quite willing to loan us some exhibit material on that occasion. They would like to have a sign indicating that the program is being given by the State Board of Health Child Hygiene Division in co-operation with the State Medical Association. This will be quite true as we shall have speakers from the Indiana Association as well as one or two speakers from outside the state who are members of the A. M. A. We hope to have Dr. Milo Miller and Dr. Walter Baker, of South Bend. There will be other speakers also.

"May we have a formal statement from your committee approving such a sign? It will be made at the A. M. A. Headquarters in Chicago."

The secretary was instructed to answer the letter stating that the Indiana State Medical Association could not truthfully say that this conference is being conducted in co-operation with the Indiana State Medical Association as such is not the fact. The State Association is wholeheartedly interested in child welfare but the Bureau of Publicity is not authorized to make any statement which would construe that this conference is sponsored in any way by the State Society.

A plan of education of the laity for lowering the death rate both for mothers and infants in obstetrical cases was presented to the Bureau of Publicity. This presentation

came in the form of a report made by the dean of the Indiana University School of Medicine at Bloomington to the Executive Committee at its last regular monthly meeting. The minutes of the Executive Committee in regard to this follow:

"The dean said that two statements had been made at the recent Child Health Conference held at Washington which, whether true or not, demanded thorough investigation and, if possible, correction. The first statement was that the death rate in obstetrical cases is higher in America than in any other civilized country. Second, the report was made that the records show that deaths in cases handled by midwives are less than those handled by physicians. The dean said that the University had thought a great deal about the best method to correct this in Indiana and had come to the conclusion that the reasons for these deaths is a lack of knowledge on the part of the public of the necessity for pre-natal care. The University, therefore, is planning a program to be carried to the laity in regard to pre-natal care. According to this program speakers will make talks throughout the state upon this subject. The Executive Committee approved the campaign suggested by the dean and suggested that he work out details and present them to the Bureau of Publicity of the State Association and that both the University and the Publicity Bureau of the State Medical Association co-operate in this matter."

The Publicity Committee instructed the secretary to invite the dean and the head of the Obstetrical Department of the University to be present at a future meeting of the Bureau.

The following bills were approved for payment:

A. B. Dick Company	$2.50
Central Press Clipping Service	5.00
	$7.50

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 2, 1931.

June 2, 1931.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 19th read and approved.

Newspaper release for publication Saturday, June 13th, "Hot Tips on Keeping Cool".

Radio release, May 23rd, "Scarlet Fever".

Request for Speaker (June or July)—Fulton County Medical Society. Speaker who can talk on something of interest to the general practitioner desired. Out-of-state speaker preferred. This is to be a "holiday" meeting and the physicians from the surrounding counties are to be invited. There is to be an afternoon of golf followed by a dinner meeting and an out-of-state after-dinner speaker.

Report on Medical meeting:

May 12—Hamilton County Medical Society, Sheridan, Indiana: "Diagnosis and Significance of Heart Sounds."

Correspondence from the president of the Woman's Auxiliary to the Indiana State Medical Association brought to the attention of the Bureau.

The following letter was sent to the director of the Division of Infant and Child Hygiene of the State Board of Health in answer to a recent letter from the director concerning the Winona Lake Child Health Week:

"Your letter of May 9th in regard to the exhibit material of the American Medical Association for the Winona Lake Child Health Week was brought to the attention of the Bureau of Publicity at its regular meeting May 19.

"The Bureau has instructed me to write you that it would be impossible for the Bureau on behalf of the Indiana State Medical Association to state that the conference is being conducted in cooperation with the Indiana State Medical Association for as a matter of fact this is not the case. The State Association is wholeheartedly interested in child welfare, but we are not authorized to sponsor this conference, and, as you recall, in times past have declined to do so under the existing circumstances."

The following bill was approved for payment:

Central Press Clipping Service	$5.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 16, 1931.

June 16, 1931.

Meeting called to order at 3:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held June 2 read, corrected and approved.

Newspaper release for publication Monday, June 22, read and approved. "Safe and Sane Swimming."

Radio release, Saturday, June 13, "Safe and Sane Swimming."

Report on medical meeting:

May 19—Child Health Conference, Logansport, "The Most Important Person—The Parent."

Request for speaker:

Fulton County Medical Society. Letter written on June 4 but no answer received as yet.

Letter received from Mrs. Edna Hatfield Edmondson, executive secretary, Indiana Congress of Parents and Teachers, stating that as the bulletin of this organization would be discontinued for the summer months the medical release could be discontinued until October 1. Mrs. Edmondson writes further, "We shall be glad to have them again at that time. May I take this opportunity to thank you for this very beneficial service?" The Bureau went on record thanking Mrs. Edmondson and the Indiana Congress of Parents and Teachers for their co-operation in distributing the release of the Bureau.

The suggestion was made that moving pictures be taken of the work of the Bureau of Publicity to be displayed at the next session of the Indiana State Medical Association.

The following letter was received from the Committee on the Costs of Medical Care:

"I am happy to be able to tell you that over 11,000 family cost of illness schedules have been received from our collaborators in the field. As you well know, this represents not only a considerable monetary contribution to the work of the Committee but also that which is more valuable, an interest and enthusiasm without which this study could never have been carried to a successful completion.

"'It was with a feeling of genuine gratitude that the Executive Committee passed the following resolution at its last meeting:

"The Executive Committee of the Committee on the Costs of Medical Care wishes to record its thanks to its collaborators who have aided in accumulating the records on the costs of sickness among representative groups of families in the United States. Such a large study on so important a subject could not have been undertaken by the Committee had it been restricted to utilization of its own resources. The Committee is sincerely grateful to all who have so generously contributed their assistance,—the officers of health departments, physicians, nurses, social workers and others and especially to the families which participated in this investigation."

Report was made that at the recent meeting of the American Medical Association at Philadelphia favorable comment was received by the Bureau of Publicity of the Indiana State Medical Association upon the method of reporting county society meetings. The Bureau wishes to take this opportunity to thank county society secretaries for their efficient manner in filling out the report forms and sending them to headquarters office.

Informal report was made that the House of Delegates of the American Medical Association at its recent meeting in Philadelphia adopted a resolution that "publicity shall be given throughout the country to the effect that the American Medical Association is the one national group which is authorized to speak for all the members of the medical profession." Exact wording of this resolution will be available later.

The following bill was approved for payment:

James H. Stygall, M.D. $2.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 23, 1931.

INDIANA STATE BOARD OF HEALTH
DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT JUNE, 1931

The current prevalence of the principal communicable diseases as indicated by the reports of the health officers in the state is summarized in this report. The general trend of all the diseases reported show a marked decline over the previous month, except typhoid fever and diphtheria. This is normal for the season. There were 487 negative cards sent in.

Typhoid Fever. The reported incidence of typhoid fever shows that the disease increases during the summer months and well into the autumn and then begins to decline. There were eleven cases last month and fifteen cases the current month. Twenty-eight cases the corresponding month preceding year. The estimated expectancy for June is twenty-five cases.

Diphtheria. The tendency of the reported incidence of diphtheria is toward a record-breaking low. This is true for the entire country. The current report shows one hundred five cases. Thirty-five cases were reported from the Indiana Boys' School. These cases were immunized against the disease with toxin anti-toxin and were not characteristic cases of diphtheria, however, bacteriologically all showed positive diphtheritic throats. They were not given anti-toxin. All recovered under local treatment. Eighty-one cases were reported the previous month. Twenty-eight cases the corresponding month last year. The estimated expectancy was sixty cases. No deaths from diphtheria in the month of May this year, which is a record-breaker for the Division of Vital Statistics.

Scarlet Fever. The reported number of cases of scarlet fever (354) is about 38 percent of the number reported last month. The corresponding month last year 260 cases were reported. The diseases will continue to decrease until the latter part of September or the first of October.

Smallpox. The reported incidence of smallpox, 350 cases, is thirty-eight percent of the number reported last month. The same month last year 440 cases were reported. The estimated expectancy for June is 372 cases. Smallpox is perennial, but it has a low report during the summer months.

Measles. The current number of cases of measles, 1,321, is about 30 percent of the cases reported last month. The corresponding month the previous year 530 cases were reported. The total number of cases of the disease last year was 3,905. The total number of cases reported for the first half of this year was 15,767 cases. There is no doubt but what 1931 is the beginning of a new five-year cycle. In 1926, five years ago, 26,255 cases were reported.

Meningococcus Meningitis. Seventeen cases for the current month is about fifty percent of the cases reported last month. The disease has been prevalent for the last eighteen months. The average for the last six months of the current year is thirty-four cases. There were 462 cases reported in 1930 and one hundred cases in 1929. The average of the five-year period before 1929 is twenty cases.

The name and number of diseases not mentioned above that were reported during the current month are as follows: Tuberculosis, 541; chickenpox, 194; whooping cough, 265; influenza, 10; pneumonia, 3; mumps, 67; poliomyelitis, 2 cases; undulant fever, 2 cases.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

INDIANA VENERAL DISEASE CLINICS

New cases (never previously admitted)	371
Total number of old cases and readmissions under treatment during month	5,604
Number of cases discharged as arrested or cured during month	225
Number of cases discontinued treatment without permission	292
Total number of cases remaining under treatment during month	5,458
Number of male syphilitic cases remaining under treatment during month	2,604
Number of female syphilitic cases remaining under treatment during month	1,724
Total number of syphilitic cases remaining under treatment during month	4,328
Total number of treatments during month	12,347
Total number of visits to clinics for treatment, examination or advice	16,778

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	221
Gonorrhea	118
Chancroid	0

During the month seven thousand three hundred eighty-one pamphlets were distributed. Four hundred fifty-one were mailed upon receipt of fifteen requests and six thousand nine hundred thirty were sent to nine people on our own initiative.

AMERICAN MEDICAL ASSOCIATION
PHILADELPHIA SESSION—1931

The 1931 session of the A. M. A. was held in Philadelphia, June 8th to 12th inclusive. Philadelphia itself possesses historical interest for many who attended the session, but there was enough of social and scientific interest to act as a drawing card, and in consequence, despite the financial depression, the attendance was one of the largest in the history of the Association, being between seven and eight thousand with probably as many more numbered among the auxiliary members, wives and vistors who swelled the attendance.

All of the activities of the Association, with the exception of the social features, were held under one roof and that proved a most excellent arrangement. The main body of the convention hall was given over to the scientific and commercial exhibits, while other rooms in the building were devoted to the meetings of the Sections. The scientific exhibit and the clinical demonstrations were of unusual number and value. In fact the scientific exhibit was the best ever given by the Association and in itself was a postgraduate course well worth the attention of any of the fellows. Likewise the commercial exhibit was of a highly instructional type and proved exceedingly interesting to the thousands who viewed it. A unique feature of these commercial exhibits was the liberal use of moving picture and stereopticon machines to aid in educational instruction.

The scientific meetings of the sections were well attended and the programs covered a wide variety of subjects and were excellent in character.

Socially the medical profession and the laity of Philadelphia were lavish and generous in their entertainment.

The House of Delegates labored long and zealously in a consideration of the business affairs of the Association. The addresses of the officers covered in detail the opera-

tion and conduct of the various activities of the Association, and showed the enormity and variety of problems that constantly are being given consideration. The Association, with its plant in Chicago, is now approximately a six million dollar enterprise, and its five hundred employees in Chicago are not only well-trained and efficient but are highly loyal to the Association and its interests.

The retiring president, Dr. William Gerry Morgan, paid tribute to the ability and efficiency of the staff at Chicago, and in particular to the secretary and general manager, Olin West, the editor of the *Journal of the A. M. A.*, Dr. Morris Fishbein, and the chief of the Bureau of Legal Medicine, Dr. William C. Woodard. He also made a recommendation that in the future an honorarium of $5,000 be granted to the president and $2,500 to the president-elect, a suggestion that was not acted upon favorably by the House in view of the expressed opinion that any one elected to the office of president of the Association should be quite willing to serve without pay, and especially in view of the fact that the Association makes a liberal allowance for all actual expenses while traveling about in the interests of the Association.

The incoming president, Dr. E. Starr Judd, delivered a very practical address in which he urged that the Association be placed upon a firm financial foundation, and that it continue to be strong in manpower for the purpose of insuring stability and future development. He especially urged that a new building for the Association be erected promptly and the profession be given an opportunity to finance it. He earnestly urged that in deciding upon the character of a new building due allowance be made for the varied and growing activities of the Association while at the same time special attention be given to esthetic appearance. The various councils and bureaus were commended for their excellent work and especially for a liberality in giving time and thought to these enterprises without compensation. Dr. Judd voiced the sentiment prevalent among many prominent medical men to the effect that there are too many medical societies and not enough good ones. He recommended that the Association encourage county and district clinical meetings. He also intimated that medical men could very profitably bend their energies and support to the A. M. A. and its auxiliary organizations instead of dividing allegiance with other outside organizations many of which are on the borderline of commercialism.

The report of the secretary was very instructive and covered a wide range of topics in connection with the varied activities of the Association. From this it was shown that the membership of the A. M. A. now is more than 100,000, of which more than 66,000 are Fellows.

The report of the Board of Trustees indicated that there has been a marked expansion of the work of the Association in every department. Fortunately the income has been on the increase, due to increased dues as well as increased membership, so that all expenditures have been met and a substantial amount placed in the reserve fund for future expansion, not the least of which will be the erection of a new building. An interesting feature of the report was that despite the fact that accounts with individual physicians involved more than $100,000, less than $6,000 had to be charged off as bad debts during the worst financial depression that the country ever has experienced. This is a remarkable tribute to the integrity and fidelity of the members of the American Medical profession, and of medical organizations dealing with the Association.

The Journal of the A. M. A. issues close to 100,000 copies each week, and that periodical now is recognized as being the largest and best of its kind in the world. Some of the activities of the Association, aside from the publication of the *Journal of the A. M. A.*, are the issuance of the medical directory, which is the one and only comprehensive and trustworthy medical directory of the United States, the publication of several special journals to meet the demand of men practicing special lines of medicine who want a high grade and thoroughly reliable journal representing their specialty. Of special interest is *Hygeia*, the health magazine, published by the Association, which has established a reputation for dependability as a health magazine for lay persons. This periodical has grown in circulation and income until it now is self-sustaining. Most of the special journals published by the Association also are self-supporting.

The work of the Council on Pharmacy and Chemistry is of far-reaching effect, and not only protects the medical profession but the public as well from the impositions practiced upon the credulous by quacks and medical pretenders, some commercial manufacturing concerns, etc. The book on New and Nonofficial Remedies should be on the desk of every reputable physician in the country.

Another important Bureau or Council is that devoted to a consideration of foods, and already the medical profession and public has been greatly protected by information concerning misrepresentations as to the kind, character and quality of foods sold in the open market. This Committee has undertaken an unprecedented task and far-reaching service in the interests of health and welfare of the public through the proper agitation and guidance of the people and physicians on matters of diet, food values and nutrition.

The chemical laboratory has done much important work in evaluating some of the newer chemicals that have been offered, sometimes under exaggertead claims of the manufacturer as to the chemical formula as well as therapeutic effect.

The Council on Physical Therapy, recently formed, has done considerable work in clarifying the atmosphere as to the value of physical therapy devices and apparatus to be used for physical therapy, and for which in the past greatly exaggerated claims have been made.

The Bureau of Health and Public Instruction has been of very great value through its work in broadcasting radio health talks and sponsoring public health meetings in every part of the United States. It also has distributed a great quantity of printed material dealing with public health education, and exploding many fallacies and frauds.

The Bureau of Legal Medicine and Legislation has been able to exercise considerable influence in connection with both federal and state legislation pertaining not only to the practice of medicine but to legislation controlling matters pertaining to public health and sanitation, and to the economical and judicious care of our war veterans and our indigent.

The Bureau of Investigation is doing an increasing work, including the demand for data on individual physicians and furnishing trustworthy information to better business bureaus and governmental agencies concerning medical frauds.

The Committee on Scientific Research has been of great service to those who are doing research work, and to stimulate efforts many cash awards have been made.

The report of the Judicial Council was interesting from the fact that it reported and disapproved of the practice of collection and appropriation of physician's fees by certain hospitals. Disapproval of contract practice by hospital and health associations, and certain corporation practices were considered economically unsound and unfavorably affecting the economic situation of physicians. The Council approved the action of the attorney general of the State of Tennessee in refusing to issue a charter under which a corporation would be permitted to engage in the practice of medicine.

The Council on Education and Hospitals has done a tremendous amount of work in an attempt to classify and evaluate schools and hospitals, and offers recommendations concerning recognition. A comprehensive discussion of the matter brought forth some valuable suggestions.

These various reports were approved and adopted with little discussion and few suggestions as to changes.

The House of Delegates did take definite action upon certain new resolutions, among which may be noted: The complaint that American physicians visiting abroad are discriminated against by various hospitals and teaching

institutions was considered in a resolution duly passed, calling upon the Board of Trustees to bring the matter to the attention of appropriate authorities in the countries in which such discrimination exists. In other words it is asked that American physicians abroad be extended the same courtesies and considerations as are extended to foreign physicians who visit the United States.

The House of Delegates went on record as approving the resolution offered by the Michigan State Medical Association to put an end to amateur specialism by empowering the State Boards of Medical Examiners to issue special licenses to physicians who are qualified to practice a specialty. The matter was referred to the Council on Medical Education and Hospitals to formulate such plans as seem necessary in order to bring about the desired change.

A very deserved swat was taken at the American College of Surgeons and some other organizations that are pretending to speak for the medical profession as a whole on matters pertaining to medicine and public health, and recommending that the lay press and public be informed that the only organization that is really representative and entitled to speak for the entire profession is the great American Medical Association, and for the reason that it is the only body organized where every member of the medical profession has through his county society or through his regularly elected delegate to the national house of delegates has full representation and a voice in its councils.

Objection was raised to the name used by the National Committee on the Cost of Medical Care, in view of the fact that the study embraces not only the cost of medical care but also the cost of dental care, hospital care, nursing care, drugs and even burial, and the public therefore gets the wrong conception of the matter. Therefore it was recommended and approved that the name of the Committee be changed to the Committee on the Cost of Care and Prevention of Illness.

The Association went on record as opposed to the government policy of awarding benefits to war veterans for sickness and disability having no connection with their service, and adopted a resolution calling for a petition to Congress asking abandonment of the policy of rendering hospital and medical benefits for veterans of the world war with non-service disability, and substituting therefor a plan of disability insurance benefit with the following provision: First, the creation of a Bureau of Disability Insurance in the Veterans Bureau as it is now constituted; second, the issuance of a disability insurance policy to each veteran, with a disability benefit clause as follows: (a) the payment of benefit during total disability, and (b) the payment of liberal hospital benefits sufficient to cover the hospital expenses of a veteran during the period of hospitalization for any disability, such benefit to be paid to a veteran on satisfactory proof of total disability, and, (c) such other provisions as are necessary for the proper administration of the act. It is expected that the American Legion will be in favor of such a move.

Concerning the resolution of the Michigan State Medical Society to the effect that physicians be urged to charge a fee to the insurance companies of not less than two dollars for filling out each preliminary and final claim, the House of Delegates went on record as thoroughly approving and recommending the plan, but it was referred to the Bureau of Economics with a view to putting into operation a plan that will be adaptable to all the states some of which have varying rules concerning insurance compensation.

The Woman's Auxiliary of the American Medical Association was given a vote of appreciation and thanks for its efforts in educating the public in health matters, and was urged to promote the distribution of *Hygeia* to parent-teachers' associations, boards of education, and similar bodies interested in education.

In connection with medical education the House of Delegates went on record as supporting the Council in its efforts to prevent unqualified students from being graduated, and from giving occasion for the continuance of commercially tainted medical schools for the acceptance of students deficient in qualifications who eventually become what are known as repeaters in endeavors to secure recognition.

The scientific exhibit was given unstinted praise, and the Board of Trustees was authorized to continue and even expand the activities of the enterprise.

The effort to give the veterans Medical Bureau representation in the House of Delegates failed, and for the reason that it was thought that the Bureau does not in reality represent the organized medical profession.

In view of the fact that there is a limited Fellowship in the Association, in spite of the fact that the membership is now over 100,000, the secretary was instructed to discover through a questionnaire why so many members fail from one cause or another to affiliate themselves with the American Medical Association. It was argued that every reputable medical man not only should identify himself with but give his active and loyal support to the American Medical Association, the great democratic medical body of this country.

Attention was called to the proposed removal of the surgeon-general's library from its present site in the city of Washington to a site in the suburbs on the ground of the Walter Reed Hospital, which it is considered would be a serious handicap to the medical profession of the entire United States who use the library, and it would be a handicap to the medical officers of the Navy, the public health service and the Veterans' Bureau in their use of it. The fact that the Surgeon-General's Library is for the use of the medical profession of the entire United States has been recognized by Congress. The site to which it is proposed to move the library is from five to six miles from the Union station and the leading hotels in Washington. In view of the disadvantages of this plan, the House of Delegates passed a resolution appealing to the proper officers of the government to locate the proposed new building for the Surgeon-General's Library somewhere in the vicinity of the Library of Congress, where it will be easy of access to the medical profession, and enable physicians from other parts of the country to reach it within a few minutes after their arrival at the Union station in Washington.

A new apportionment of representation in the American Medical Association was adopted, and for the next three years it will be on the basis of one delegate for each eight hundred members. However, each State medical association, irrespective of the number of members, and no matter how small its membership may be, is entitled to one delegate. On this basis the membership of the House will be continued at 173 members, as at present.

Considerable controversy arose over the subject of medical supervision and care in the public schools, and a resolution was adopted which says, "We especially condemn the examination of pre-school children enmasse in clinics, health units and similar agencies. Such examinations cannot but be perfunctory, superficial and unsatisfactory to physician and child alike. We recommend education of the public as to the necessity for medical supervision of the pre-school child by the family physician, and we insist that medical examination of each child shall be through the individual."

On the subject of medical legislation the House of Delegates went on record as recommending that a national committee be created to function continuously with the Board of Trustees and the Bureau of Legal Medicine, for the purpose of representing the true point of view of the medical profession throughout the country on matters coming before Congress, and to be continuously in touch with legislative activity so that appropriate information may be transmitted to the various state and county medical organizations.

As usual the medicinal alcohol question came up, this time in executive session in order to avoid newspaper controversy, but the House went on record as urging fellows of the American Medical Association to demand of senators and congressmen the repeal of those portions of

the Volstead Act which substitute the Act of Congress for the seasoned opinion of the medical profession, which robs the sick of their right to be healed of diseases and ailments according to the recommendations of eminent authorities, and which deprives the physician of his rights of the free exercises of his judgment in the practice of his profession. The House recommended that a committee in connection with the Bureau of Legal Medicine and Legislation, and in co-operation with the Board of Trustees, be directed to prepare a bill to be presented to Congress, correcting the unfortunate provisions of the Volstead Act, limiting the amount of alcohol used, and providing such regulations as will permit doctors to prescribe whatever amounts of alcoholic liquors may be needed for their respective patrons, and subsequently such reasonable restrictions as may be felt wise and best after a conference with the head of the prohibition department.

The Chicago Medical Society presented an invitation for the Association to hold its 1933 session in Chicago during the centennial exposition which is to be held in Chicago that year.

Election of officers resulted as follows:

President-elect, E. H. Cary, Dallas, Texas.
Vice-president, George C. Yeager, Philadelphia.
Secretary, Dr. Olin West, Chicago.
Treasurer, Austin A. Hayden, Chicago.
Speaker of the House, F. C. Warnshuis, Grand Rapids.
Vice-speaker of the House, Albert E. Bulson, Fort Wayne.
Trustee for five years, Dr. Thomas F. Cullom, New Orleans.

A message of greeting was sent to the Venerable William W. Keen, ex-president of the Association, and John B. Deaver, both of whom were reported ill.

A number of honorary and affiliate fellows were elected.

New Orleans was selected as the place for the 1932 session.

WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

Again it is the pleasure of this writer to review the high points of another annual session of the Woman's Auxiliary to the American Medical Association; this time, the ninth, was held in Philadelphia, June eighth to twelfth. It was the first time that the Woman's Auxiliary was in complete charge of the entertainment for all visitors, members of the families of physicians. Highly successful were the arrangements for the Auxiliary meetings at the Bellevue-Stratford Hotel, and the entertainments, fulfilling the hopes of the Convention Committee (made up of women from Pennsylvania, New Jersey and Delaware) that we "carry away a vivid impression of Philadelphia as a great medical and cultural center, and a city abounding in hospitality."

The official Auxiliary program began Monday with a luncheon in honor of the Auxiliary presidents, followed by a round table conference on (1) program for county auxiliary meetings; (2) the technique and value of a committee on public relations; and (3) History and Archives.

The National Board dinner at six o'clock preceded the pre-convention Board meeting with the president, Mrs. J. Newton Hunsberger, Pennsylvania, presiding. Short reports were given by officers of the Auxiliary and Chairmen of standing committees. The budget and proposed changes in the Constitution were discussed, and the nominating committee elected.

The general meeting on the Roof Garden of the Bellevue-Stratford Hotel began at nine o'clock on Tuesday. After singing "America," the invocation and an "In Memoriam" with the audience standing, Mrs. Hunsberger read the presidential address; its record of untiring labor and accomplishments, stressing the value of personal contact, elicited much applause. Mrs. Harry C. Podall, of Pennsylvania, corresponding secretary, read of the clerical work involved in this growing organization.

Mrs. Fred L. Adair, of Illinois, treasurer, reported bills paid and more than $2,000 in the treasury.

Mrs. Southgate Leigh, of Virginia, first vice-president and chairman of organization, told of the division of territory among the four vice-presidents, and the four surveys prepared during the year and sent to editors of state journals for publication; the formation of a state auxiliary to the North Dakota Medical Association, which makes thirty-eight states in the process of organization, with New Hampshire and New Jersey completely organized; the 12,494 paid members in nine years represent a victory for ardent workers, especially when one considers the difficulties in perfecting auxiliaries.

The report of Mrs. E. V. DePew, of Texas, chairman of the Program Committee, was read by Mrs. A. T. McCormack, of Kentucky. Reference was made to the popularity of the study envelopes, particularly the one on "Communicable Disease Control," which is used not only by auxiliary groups but by other women's organizations. Several states have their own study programs prepared by their medical associations; among these are Oregon and Illinois. It also was brought out that "Aggressiveness on our part defeats our purposes."

The report of Mrs. Elmer L. Whitney, of Michigan, chairman of Legislation, was read by Mrs. McCormack. Mrs. Whitney urged county presidents to have one meeting devoted to legislation in order to educate members as to movements of vital importance to the medical profession, saying, "If each of our 12,000 members were well-informed, we would be of incalculable strength."

Mrs. T. O. Freeman, of Illinois, chairman of the Finance Committee, gave a black board comparison of expenditures of the outgoing administration and the present budget. Mention was made of the Auxiliary playing cards, the back of which are decorated with the "better half of the caduceus"—our official insignia.

Mrs. A. Haines Lippincott, New Jersey, chairman of the Public Relations Committee, reported a comprehensive study of the opportunities for service awaiting well-informed auxiliary members.

Mrs. R. N. Herbert, of Tennessee, chairman of the *Hygeia* Committee, reported sending out over 3,000 pieces of mail; that 110 auxiliaries had sent in their quota of subscriptions; that there were 325 more auxiliary subscriptions than last year; that Tennessee had a *Hygeia* float in the May Day parade. Mrs. Herbert gave radio talks featuring *Hygeia,* and read a paper on "Educate with *Hygeia*" before several audiences.

Mrs. Wayne Babcock, of Pennsylvania, chairman of the Revisions Committee, read the changes suggested by the committee and recommended from the pre-convention board meeting; they were adopted.

Mrs. John O. McReynolds, Texas, chairman of Press and Publicity for State Journals, expressed her appreciation of the co-operation received from state editors and the response to questionnaires sent out—many of the answers will be put into form for study and enjoyment. Mrs. Walter Jackson Freeman, of Pennsylvania, editor for the American Medical Association *Bulletin,* reported nine letters containing accounts of activities over the Auxiliary world; she said, too, "I always stressed some phase of the convention plans to create interest." (Over 1,100 women registered at the convention). Furthermore, the subscription to the *Bulletin* is only fifty cents. Mrs. Freeman was in charge of the distribution of treasurer's receipt blanks; 1,000 books were ordered, 831 used; she advises presidents to have a supply of these for state meetings.

Mrs. Edgar S. Buyers, of Pennsylvania, chairman of the Printing Committee, reported expenditure for booklets, programs, etc.

The historian, Mrs. S. C. Red, of Texas, founder of the Woman's Auxiliary to the American Medical Association, and its first president, spoke first of the systematic filing of Auxiliary doings, and second, of her interest in the history. Mrs. Red recently compiled a history of early

medicine in Texas, entitled "The Medicine Man in Texas"; this is to assist in establishing a loan fund for medical students in Texas. Mrs. Red's book has received very favorable comment.

After luncheon the ladies had their choice of (a) trip to Valley Forge; (b) trip on Delaware River; (c) visit to Historical Society of Pennsylvania; (d) visit to Print Club.

Following the general meeting of the American Medical Association with Dr. William Gerry Morgan, of Washington, D. C., retiring president, and the address of Dr. E. Starr Judd, of Minnesota, incoming president, hundreds met again in the ball room of the Bellevue-Stratford Hotel, at the supper dance in honor of the Woman's Auxiliary.

Most of Wednesday morning's meeting was devoted to state reports—the Indiana report written by Mrs. William S. Tomlin, Indianapolis, was read by Mrs. F. W. Cregor. One notes a broadening of the work in the various states as a better understanding of possibilities develops. Pennsylvania is now the banner state with over 1,900 members, an increase of more than 200 in the year.

The nominating committee, Mrs. S. C. Red, of Texas, chairman, presented the names of Mrs. Walter Jackson Freeman, Philadelphia, president-elect; Mrs. James Blake, Minnesota, first vice-president; Mrs. James F. Percy, California, second vice-president; Mrs. J. Ralston Wells, Florida, third vice-president; Mrs. Robert W. Tomlinson, Delaware, fourth vice-president. With their election a rising vote of thanks was extended Mrs. Hunsberger, who presented the gavel and president's pin to her successor, Mrs. Arthur B. McGlothlan, of St. Joseph, Missouri, elected at the Detroit session. After felicitations to Mrs. McGlothlan the meeting adjourned, and the members assembled again at the annual Auxiliary luncheon, with guests and speakers from the American Medical Association. Mrs. Hunsberger presided, and Mrs. Joseph J. Meyer, of Pennsylvania, was toastmistress. Mrs. Meyer introduced Dr. E. Starr Judd, who expressed his pleasure at attending such a large gathering of Auxiliary members, and spoke of the excellent condition of the Auxiliary in Minnesota; he then reviewed scenes of other days, mentioning that in 1847 when the American Medical Association was organized in Philadelphia, women were present, and that in 1850 in Cincinnati, they were active in social gatherings. Dr. Judd spoke of Mrs. Mayo, the mother of Doctor Will and Doctor Charles Mayo, former presidents of the A. M. A., that during the Civil War when Indian outbreaks in Minnesota kept many men at home, Doctor Mayo was sent to Mankato and New Ulm following a fresh outbreak, and Mrs. Mayo became the doctor of the community as soon as her husband left, wounded soldiers being brought to the aid station she established. He also told of her heroic work during a diphtheria epidemic. Dr. Judd closed his remarks by saying that she was an example for all, for she took over the activities of her husband and carried on,—the real purpose of the Auxiliary.

Dr. Walter F. Donaldson, Pittsburgh, spoke of the Medical Benevolence Fund of the Medical Society of the State of Pennsylvania, which now amounts to $87,000; $6,000 was contributed by the Woman's Auxiliary. The fund is to give pecuniary aid to the members of families of physicians. Among others introduced was Dr. Joel T. Boone, personal physician to President Hoover.

In the afternoon there was a trip through historic Philadelphia with tea at Stenton, the home of James Logan, 1728, friend of William Penn. This writer elected a visit to the exhibit in the new Municipal Auditorium, having heard it said that it was "the best yet"; it justified such praise. Then, under the guidance of Mrs. Walter Jackson Freeman, a visit was made to the College of Physicians.

Wednesday night, the Woman's Auxiliary to the Medical Society of the State of Pennsylvania entertained at a reception, with a musical program and buffet supper in the University Museum; the program was presented with the compliments and best wishes of Dr. William W. Keen, president of the American Medical Association 1900-1901.

Thursday morning Mrs. Arthur B. McGlothlan presided at the general round table conference. In her presidential address, Mrs. McGlothlan outlined her plans, saying "There is nothing new to offer in policy," that she would "further develop the already established policies and give aid to state auxiliaries."

The discussions growing out of the subject "What have I gotten out of this convention?" and the questions and suggestions from the "Question Box" (an innovation) were enlightening and entertaining. This meeting was followed by the post-convention Board meeting, Mrs. McGlothlan further manifesting her powers of friendly leadership.

In the afternoon there was the choice of a trip to "Longwood," estate of Mr. and Mrs. Pierre du Pont, a visit to Pennsylvania Museum of Art, or a visit to the College of Physicians.

Thursday night in the ball room of the Benjamin Franklin Hotel the President's Ball was held. In the receiving line were Dr. and Mrs. E. Starr Judd and Dr. and Mrs. E. H. Cary.

Friday there was a trip to Atlantic City with the Atlantic City Auxiliary hostesses at the Claridge, and a tour of Wanamaker's with luncheon in the Crystal tea room.

It was a wonderful convention, one with a very full program, in which history, culture, science, procedure and pleasure united to form a perfect whole.

Respectfully submitted,
MRS. F. W. CREGOR.

STATE REPORT OF THE WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

The Woman's Auxiliary to the Indiana State Medical Association, with eight counties organized, has a listed membership of over 400, and a paid-up membership of 330. Our interests have been centered largely upon increasing the enrollment of our organization. Since March 31, 1931, 116 new members have been added and two counties organized.

Our organization was called upon by the medical profession to assist in legislative matters both state and national, and each of our county units communicated with its representative in opposing the Jones-Cooper Bill, which was much appreciated by our medical profession.

Our *Hygeia* chairman reported twenty-nine new subscriptions and that more than fifty percent of our members are reading *Hygeia*.

We seem to be taking ourselves more seriously and the interest manifested by the various county units has been most gratifying. One county is furnishing milk to the under-nourished children of one of its city schools. Another is assisting the Visiting Nurses' Association—others are doing hospital sewing and one county is devoting time and effort toward a "Christian Home", an institution for unfortunate girls, as a memorial to their vice-president, whom they recently lost by death.

We are compiling a Year Book for the Woman's Auxiliary for 1931 and 1932 which we expect to have ready for distribution at our annual state meeting to be held in Indianapolis in September.

Many joint meetings of the Woman's Auxiliary and the medical societies have been held in the various counties which have been well attended, with good speakers and musical artists provided for their entertainment.

Splendid cooperation exists between the Woman's Auxiliary and the medical profession, and as we become better understood our progress is further assured.

Respectfully submitted,
MRS. WILLIAM S. TOMLIN,
State President.

Activities of Woman's Auxiliary Across the Sea

For the benefit of the doctors' wives, daughters, mothers and sisters who may not know that the spirit of the Woman's Auxiliary has crossed the sea, it gives me great pleasure to tell you something of its work in a foreign land.

On the second floor of a cafe on Alserstrasse, Vienna, Austria, is a small "club" about which clusters an important colony of Vienna. It is a most representative group, having members from nearly all the states in the union. The name of this organization is the American Medical Association of Vienna and dates from 1903.

Not all the people who visit the club rooms are physicians. Their wives and daughters, mothers and sisters are there also. Many doctors go to Vienna to study, some for several weeks, a year and some longer. Their families sore feel the need of other interests aside from the general routine of sightseeing, shopping, etc. It was a group of just such women, led by Mrs. G. N. Morrisey, of Fort Pierre, South Dakota, in June, 1928, with the endorsement and assistance of Dr. Ralph A. Reynolds, of San Francisco, California, who drew up the constitution and by-laws, thus organizing the Woman's Auxiliary to the American Medical Association of Vienna.

Officers chosen are women who expect to be in Vienna several months. A meeting is held each week as the membership is constantly changing. After the regular business meeting, a musical program, or some good Viennese speaker or entertainer is provided and every other week a bridge tea is given. Dances and evening parties are frequently given and are always well attended by the doctors.

During the time I enjoyed a membership in the Vienna Woman's Auxiliary we had desk room in one corner of the "Club". We kept lists of all the best hotels and pensions and maintained an up-to-the-minute shopping guide, doing last-minute shopping for many of the doctors who had come alone wishing to take back to their dear ones across the sea some of Vienna's artistic and beautiful wares. In fact, the Woman's Auxiliary was and still is a veritable information bureau for its members and the doctors. In the absence of our doctors, who were usually busy during the day with their classes, one could always find pleasant companionship among the women of the Auxiliary to accompany them on some sight-seeing tour or shopping expedition. These courtesies were very helpful, especially to the newcomer.

In my recent search for late news from the Woman's Auxiliary of Vienna, I was much interested to learn that to an Indiana woman, Mrs. Louis A. Sandoz, of South Bend, belongs the honor of having served as its president for two terms of office during the past year. Doctor and Mrs. Sandoz have recently returned from Vienna, where they spent a year.

Mrs. Sandoz is deeply interested in the work the Woman's Auxiliary is doing in Vienna and the place it fills in the lives of the doctors' families during their sojourn there. She reports an average enrollment of forty-five during the winter months the past year and that they now boast of a paid secretary. They have a circulating library of over five hundred volumes.

This little organization has many paths connecting it with the outside "Viennese Circle" and they are all much traveled. It is a miniature "short-cut" for social intercourse.

It is a strange contrast or experience coming from the outside world into this little American retreat. It is somewhat of a place of refuge where the American can retire and escape from foreign influences and customs, and where a little band of women is waiting to greet and welcome us into their little American Home, which they are so earnestly striving to establish for us, that we may be happy in a foreign land.

I earnestly urge every doctor's wife, daughter, mother or sister who makes the pilgrimage to Vienna to align herself with the Woman's Auxiliary to the American Medical Association of Vienna.

Mrs. William S. Tomlin.

FORT WAYNE MEDICAL SOCIETY

The Fort Wayne Medical Soicety held its regular meeting at the Wayne Pharmacal Building, May 12th, 1931, at 8:15 p. m.

Dr. Catlett presented a clinical case of a male with hemo-appendicitis. White blood count 13,000. 78% polymorphs.

Dr. Lashmet, from the Department of Clinical Investigation at Michigan University, presented a paper on "Obesity and Its Reduction." Obese individuals were divided into three groups: (1) Those who over eat, (2) those who are lazy and do not exercise, and (3) a combination of groups (1) and (2). Technical methods were given for the estimation of the intake and output on a caloric basis, a practical method of estimating the insensible loss by vapor and $C.O._2$ being described in detail. Samples of reduction diets were given and their effect on obese persons graphically outlined. The diets are all low in protein. The weight loss at the beginning of the diet is not very marked but after some 16 days, the body tends to put out large amounts of water and the patient rapidly reduces. The essayist did not prescribe to the theory that endocrines have a lot to do with total fat deposit although they do exert a faction on fat distribution. He emphasized all through the paper that obesity is a matter of balance between intake and output.

Paper discussed by Drs. Schafer, Hane, Hall, Johnston, Worley, Zehr, Lohman, Weaver, Rothschild, and Bruggeman.

Motion made and carried that the copies of the sample diets be made and given to each member of the society and hosiptals at the society's expense.

The Fort Wayne Medical Society held its regular meeting May 19th at the Wayne Pharmacal Building, at 8:15 p. m.

Dr. King reported the case of a male 28 years of age, found dead along the river bank, all physical and laboratory findings being negative except for an inflamed prostate, distended bladder and evidence of an acute gonorrhea.

Dr. Harshman showed the specimens of an enlarged liver and spleen in a six week's old baby. The liver was about 8% of the child's body weight.

A paper was presented by Dr. Miles F. Porter, Jr., who summarized the present day information concerning encephalitis particularly in the lethargic type. He also reported his observances in some 41 cases and the general conclusion of his paper was that the outlook is bad in all of these cases, also temporary arrests and episodes of importance may be noted in the subsequent history of the patient. Paper was generally discussed by the members present.

FORT WAYNE MEDICAL SOCIETY
1930-1931

Yearly Report of Secretary

I. Our membership totals 143, four not having paid their 1931 dues.

II. The movement of our membership population includes seven new ones received by application: Drs. Titus, Draper, Moravec, Emme, Somers, Duemling, and Kidder. Two members have been received by transfer from Minnesota: Drs. Wright and Hane. One application is now in the hands of the censors. Four members have moved from the city. One member, Dr. L. B. Schneider, has been lost by death.

III. In September the society was host to the State Association for their yearly meeting. The local society provided historical drives, teas, dinners, luncheons, golfing parties, a public meeting, and a vaudeville show. We have been told by others that this meeting was a decided social success. The unity of purpose as demonstrated by each member of our society was most outstanding.

IV. During the year the activities in a public health and legislative way have been:

1. Expansion of the scope of the clinic work started last year for Fort Wayne's indigent.
2. The instigation of a Credit Rating Bureau experiment following initial discussions last year.
3. Telephone directory changes such that "Cultists" are not listed with the M.D.'s.
4. Revision of our own Constitution and By-Laws.
5. Opposition voiced to our representative at Washington concerning the Jones-Cooper bill.
6. Opposition voiced to our legislators at Indianapolis concerning the change in the State Aid School appropriations.
7. Active support of the Grim bill at the state assembly.
8. Active support of a new sterilization act.

V. The twenty-nine meetings of the year are summarized as follows:

1. The first meeting suggested by the president consisted of a very interesting talk by a local banker, Donnelly P. McDonald, on the subject of "Investments".
2. Six meetings were given at the local hospitals, active clinical cases being presented by staff members.
3. The society was entertained at a dinner at the General Electric plant when Doctor Garton presented a most instructive paper on "The Estimation of Permanent Disability in Industrial Accidents".
4. Seven out-of-town speakers were present:
   E. N. Kime, Indianapolis: "Dermatology and the General Practitioner".
   G. DeTakats, Chicago: "The Causes of Failure in the Injection of Varicose Veins".
   John Alexander, Ann Arbor: "Thoracic Surgery".
   A. R. Barnes, Mayo Clinic: "Coronary Occlusion".
   Emmett Keating, Chicago: "Physical Examination".
   F. H. Lashmet, Ann Arbor: "Obesity and Its Reduction".
5. Forty of our local members took active part in preparation of subject material for the programs. Besides numerous interesting and well-prepared case reports the following subjects were treated: Spinal Anesthesia, Painful Feet, Phases of Proctology, Electro-cryptectomy of Tonsils, Pelvimetry by X-ray, Sufficient Treatment of Syphilis, Dependable Laboratory Test for Pregnancy, Blood Pressure Observations in Pilots, Infected Prostate, Pellagra, and Psoriasis.
6. The average attendance at each meeting was thirty-five members and three guests. The smallest attendance was fourteen and the largest sixty-five.

The Fort Wayne Medical Society held its regular meeting at the Wayne Pharmacal Building June 2, 1931, at 8:30 p. m.

Doctor Cornell made a follow-up report in a case of colitis which he had summarized before the society several weeks previously. The patient has greatly improved under staphylococcic vaccine.

Doctor Lohman gave a follow-up report on a case which he had summarized a few weeks before. The case at this time showed a staphylococcic blood stream infection.

The business of the evening consisted of a vote on the various amendments proposed at previous meetings.

Votes on the amendments as a whole for constitution and by-laws were taken and carried.

Doctor VanBuskirk moved that we have a Country Club picnic. Motion made to amend this to the effect that picnic be a stag affair. Motion and amendment carried.

Doctors VanBuskirk, Lohman, and Cornell were appointed as a committee to look after details.

Twenty-six members present. Adjournment.

Respectfully submitted,
L. P. HARSHMAN, M.D.,
Secretary.

CORRESPONDENCE

TUBERCULOSIS SANITARIA

Indianapolis, June 16, 1931.

Editor THE JOURNAL:

I have read your very just criticism of some of the activities of the 1931 session of the general assembly. The tuberculosis sanatoria bill I think shows a lack of understanding Indiana's need in regard to sanatoria accommodations for tuberculous patients. In the first place I think that the State Sanatorium at Rockville should be enlarged and creditable buildings erected in place of the fire trap that houses about ninety adults. The institution should have a capacity of from three hundred to three hundred and fifty adults, and with the children's building, with a capacity of eighty, would make an institution adequate to warrant full staffs of physicians and nurses. At present it has good laboratories, well equipped, and doing good work. The need for a similar institution in southern Indiana is very great and one should be built.

In my opinion it should not be expected of the state to treat any but *indigents*. Those who are able to *pay* for treatments can get them at home or go to sanatoria of their own choice. In other words, the idea should be for the state to care only for such as are a burden on the medical profession and unable to secure proper and adequate treatment. The state should do no less than provide for adequate facilities for treatment if it attempts to provide at all. Nine small institutions without full equipment and proper staffs would not be a credit to the state, and joint management of state and county would certainly be an unsatisfactory arrangement.

I hope that the medical profession will become interested in the matter and that a proper solution will be worked out. Judging from my knowledge of the demand for sanatorium treatment, a private institution in Indiana would be quite well patronized by those who are able to pay for treatment.

It is considered that a patient-bed for each annual death is about right for sanatoria capacity. There are about eleven hundred beds available now. With seven or eight hundred more the field would be fairly well covered. During 1929 forty-nine percent of the county hospital beds in the state were occupied, and I know of no good reason why wards in county hospitals could not be utilized for tuberculous patients with proper precautions taken for the care of such.

Fraternally yours,
AMOS CARTER, M.D.
(Ex-supt. Indiana State Sanatorium.)

BOOK REVIEWS

BOOKS RECEIVED SINCE JUNE 1, 1931:

DIABETES. A Handbook for the Patient. Treatment by Insulin and Diet. By Orlando H. Petty, M.D., Professor of Diseases, of Metabolism in the Graduate School of Medicine, University of Pennsylvania, Physician in Charge of Department of Diseases of Metabolism, Philadelphia General Hospital. Introductory Foreword by John B. Deaver, M.D. Fifth revised and enlarged edition, 231 pages. Cloth. Price $2.00.

TEXTBOOK OF HISTOLOGY. For Medical and Dental Students. By Eugene C. Piette, M.D., Pathologist and Director of the Laboratory of the West Suburban Hospital, Oak Park, Illinois, etc. 466 pages, with 277 illustrations, some in color. Cloth. Price $4.50. F. A. Davis Company, Philadelphia, 1931.

MEDICAL JURISPRUDENCE. By Alfred W. Herzog, Ph.B., A.M., M.D., Honorary Academician of the International Academy of Letters and Sciences, and Editor of *The Medico-Legal Journal*. 1051 pages. Cloth. Price $15.00. Bobbs-Merrill Company, Indianapolis, 1931.

FOOD ALLERGY. Its Manifestations, Diagnosis and Treatment with a General Discussion of Bronchial Asthma. By Albert H. Rowe, M.D., Lecturer in Medicine in the University of California Medical School, San Francisco, etc. 442 pages. Cloth. Price $5.00. Lea & Febiger, Philadelphia, 1931.

HEALTH ON THE FARM AND IN THE VILLAGE. A Review and evaluation of the Cattaraugus County Health Demonstration with Special Reference to Its Lessons for Other Rural Areas. By C. E. A. Winslow, Dr. P. H., Professor of Public Health, Yale School of Medicine. 281 pages. Cloth. Price $1.00. The Macmillan Company, New York, 1931.

BOOK REVIEWS

INTESTINAL TOXEMIA—Biologically Considered. By Anthony Bassler, M.D., F.A.C.P. F. A. Davis Company, Publishers, Philadelphia. 433 pages. Price $6.00. Well printed. Few illustrations.

We have rarely attempted to review a book that presented more of a problem than this one. Just after we had come to the comfortable conclusion that a great deal of this intestinal toxemia lore was without scientific basis we are presented with this treatise which says that it is most important in the causation of a wide variety of human ailments. Bassler first pays his compliments to all those who oppose the idea that intestinal toxemia is an important cause of illness. In emphatic language he shows how and why they are all wrong. He then builds up an argument which in itself seems rather complete and satisfying though it is not orthodox. The book certainly represents a great deal of work and study in relation to an important subject. The book is well and attractively printed.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

MEAD'S POWDERED BREWER'S YEAST.—Dried brewer's yeast harvested under aseptic conditions; it assays approximately 13 vitamin B1 units per gram and approximately 1 vitamin B2 unit per gram. The product is proposed for prophylaxis and treatment of conditions arising from deficiency of the vitamin B complex in the diet. It is also proposed as a means of stimulating the appetite and growth and for a beneficial effect in lactation. Mead Johnson & Co., Evansville, Ind. (*Jour. A. M. A.*, May 2, 1931, p. 1477).

DIPHTHERIA TOXOID.—A diphtheria toxoid (New and Nonofficial Remedies, 1930, p. 364) prepared from diphtheria toxin by treatment with formaldehyde. It is marketed in packages of one immunization treatment and in packages of fifteen immunization treatments. Eli Lilly & Co., Indianapolis.

AMPULES SOLUTION OF NUPERCAINE-CIBA, 25 CC.—A 1:1,000 solution of nupercaine-Ciba (*Jour. A. M. A.*, March 21, 1931, p. 946). Ciba Co., Inc., New York.

SCHIEFFELIN PSYLLIUM SEED.—A brand of psyllium seed—N. N. R. (New and Nonofficial Remedies, 1930, p. 311.). Schieffelin & Co., New York. (*Jour. A. M. A.*, May 16, 1931, p. 1694).

DIPHTHERIA TOXIN FOR SCHICK TEST IN PEPTONE SOLUTION.—A diphtheria toxin (New and Nonofficial Remedies, 1930, p. 380) made by growing diphtheria bacilli in broth, ageing and diluting with peptone solution according to W. E. Bunney. The product is ready for use. It is marketed in packages of one syringe containing diluted diphtheria toxin sufficient for one test and in packages of one vial containing sufficient for ten tests. As a means of control, diphtheria toxin heated to 75 C, and diluted with peptone solution is supplied. Lederle Laboratories, Inc., Pearl River, N. Y.

POLLEN ALLERGEN SOLUTIONS-SQUIBB.—The following pollen allergen solutions-Squibb (New and Nonofficial Remedies, 1930, p. 27, *Jour. A. M. A.*, December 20, 1930, p. 1913), marketed in 5 cc. vials, has been accepted: Cottonwood Pollen Allergen Solutions-Squibb. The following pollen allergen solutions-Squibb (New and Nonofficial Remedies, 1930, p. 27; *Jour. A. M. A.*, December 20, 1930, p. 1913), marketed in 5 cc. vials, in treatment set packages A, B, C and D, and in three vial treatment packages, has been accepted: Grasses Combined Pollen Allergen Solutions-Squibb (Bermuda Grass, June Grass, Orchard Grass, Red Top, and Timothy, in equal parts). E. R. Squibb & Sons, New York. (*Jour. A. M. A.*, May 30, 1931, p. 1872.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

ZED BISCUITS (Zed Corporation, San Francisco, Calif.) Twice baked biscuits, leavened with baking powder, containing cracked whole wheat, whole wheat flour, rye meal, oat meal, wheat bran, bread flour, coconut oil, buttermilk (cultured), caramelized sugar, brown sugar and a mixture of orange, pineapple, grape and apple juices. Zed biscuits are claimed to be wholesome, nutritious, regulative and delicious.

MERRELL-SOULE POWDERED CULTURED SKIMMED LACTIC ACID MILK (AKRELAC) (Merrell-Soule Co., New York). This is a powdered artificial buttermilk, soured with pure culture of lactic acid organisms (*Streptococcus lactis*). The use of the product is proposed by the manufacturer to rectify digestive disturbances under artificial feeding, for acute intestinal disturbances, prolonged malnutrition, and complemental feeding.

WHEATENA (THE DELICIOUS WHEAT CEREAL) (The Wheatena Corporation, Wheatenavilla, Rahway, N. J.) A toasted granular wheat cereal composed of the embryo, essentially all of the endosperm and the major portion of the bran of red winter wheat. Wheatena is claimed to be a quick cooking wheat breakfast cereal with an individual toasted flavor requiring from two to three minutes for preparation. *Jour. A. M. A.*, May 2, 1931, p. 1478.)

OLDE-TYME BREADS (FAMILY, ROUND, HEARTH AND PULLMAN) (The City Bakery, Bellefonte, Pa.) White bread loaves in wax-paper or "glassine" wrappers.

SLICED PURITY BREAD (Purity Baking Co., Ottawa, Ill.) A sliced white bread made by the sponge dough method.

AMAIZO GOLDEN SYRUP (CORN SYRUP AND REFINERS' SYRUP) (American Maize-Products Co., New York). A blend of corn syrup and refiners' syrup flavored with vanilla extract. (*Jour. A. M. A.*, May 16, 1931, p. 1695).

MEAD'S POWDERED LACTIC ACID MILK NONCURDLING NO. 1 WITH DEXTRI-MALTOSE (Mead Johnson & Co., Evansville, Ind.). A powdered, spray-dried homogenized milk containing added lactic acid, maltose and dextrin. It is claimed that the mixture with water may be boiled without curdling or change of color or taste. It is proposed for use in infant feeding.

LIBBY'S TOMATO JUICE (Libby, McNeill & Libby, Chicago). A pasteurized tomato juice, seasoned with salt. It is claimed that the method of preparation tends to retain the vitamins of the original fruit. It is claimed that the product is a food which stimulates the appetite and that, like orange juice, is a protective food against scurvy.

SELF RISING WASHINGTON FLOUR (Wilkins-Rogers Milling Co., Washington, D. C.) A mixture of wheat that, like orange juice, is a protective food against scurvy. flour with baking powder leavening and seasoning—calcium acid phosphate. sodium bicarbonate and salt. The flour is claimed to be adapted to biscuit, pastry and cake baking. (*Jour. A. M. A.*, May 23, 1931, p. 1780).

MERRELL-SOULE POWDERED PROTEIN MILK (BOILABLE) (The Merrell-Soule Co., Inc., New York). A powdered food made from milk; higher in protein and mineral salts, lower in lactose than dry whole milk. It is only slightly acid. The preparation is proposed for use in infant feeding.

JERRY'S KEW-BEE BREAD (Jerry's Bakery Co., Terre Haute, Ind.). A white bread made by the sponge dough method.

PAGE EVAPORATED MILK (STERILIZED, UNSWEETENED) (The Page Milk Co., Merrill, Wis.) An unsweetened evaporated milk. A mixture of one part water and one part of this product corresponds to the legal standard for whole milk.

VERMONT MAID BREAD (Vermont Baking Co., White River Junction, Vt.) A white bread made by the sponge dough method.

STALEY'S GOLDEN TABLE SYRUP (A. E. Staley Manufacturing Co., Decatur, Ill.) A table syrup; a corn syrup base (glucose) flavored with choice refiners' syrup.

STALEY'S CRYSTAL WHITE SYRUP (A SAVORY BLEND OF PURE CORN SYRUP, GRANULATED SUGAR SYRUP AND VANILLA) (A. E. Staley Manufacturing Co., Decatur, Ill.) It is a mixture of corn syrup base (glucose) and sucrose flavored with vanilla extract. (*Jour. A. M. A.*, May 30, 1931, p. 1872).

PROPAGANDA FOR REFORM

SOLVOCHIN NOT ACCEPTABLE FOR N. N. R.—Solvochin (Spicer & Co., Glendale, Calif., distributor) is a solution of quinine hydrochloride containing small amounts of quinine base together with sufficient phenyldimethylpyrazolon (antipyrine) to render the basic quinine soluble. It is claimed that the solution possesses advantage over the usual quinine preparations in that it may be injetced without local irritation. It is recommended in the advertising as the medicament of choice in the treatment of lobar pneumonia, and it is claimed to be essential that the injections of quinine for the treatment of this disease be by the intramuscular route. The Council on Pharmacy and Chemistry declared Solvochin unacceptable for New and Nonofficial Remedies because it is marketed with unwarranted therapeutic claims. (*Jour. A. M. A.*, May 2, 1931, p. 1477.)

REFINED ANTIPNEUMOCOCCUS SERUM.—Since the discovery of the etiologic relationship of the pneumococcus to pneumonia, the search for an effective antipneumococcus serum has continued unabated. Little progress was made in this direction until 1913, when the biologic classification of pneumococci by Dochez and Gillespie provided a rational basis for modern serum therapy in this disease. Reports on the use of refined and concentrated serum preparations bring evidence showing that a considerable reduction in the mortality rate of type I pneumonia is secured by the use of these preparations. Experiments with the type II pneumonia and particularly types III and IV were not favorable to the use of preparations representing these types. In conformity with the evidence, the Council on Pharmacy and Chemistry accepts antipneumococcus serum representing type I but does not accept serums representing other types of mixtures of all types, holding that type I serum alone is worthy of clinical trial. (*Jour. A. M. A.*, May 2, 1931, p. 1505).

THE MILO BAR BELL.—Those who study the fantastic advertisements of the "big muscle boys," appearing in such magazines as *Physical Culture*, will remember the pictures of the superman, with the musculature of an ox, holding aloft a particular brand of dumb-bells known as the "Milo Bar Bell". From the advertising, one gathers that by the use of this particular device, the puniest and weediest of individuals can develop into veritable Samsons. It appears that the Milo Bar Bell Company, which exploits this device, is a trade name used by one D. G. Redmond. The Federal Trade Commission has issued an order to Redmond to cease and desist from: "Representing by pictures, statements or otherwise, that physical development reasonably attributable to natural growth has been brought about by the use of respondent's bar bell or other appliance or course of instruction." (*Jour. A. M. A.*, May 2, 1931, p. 1527).

LIMITATION OF THE MANUFACTURE OF NARCOTIC DRUGS.—In accordance with the provisions of the Hague convention of 1912, Congress made laws for controlling and regulating the production of and the traffic in the drugs mentioned by the convention. Now domestic production and traffic in these dangerous drugs is limited by federal law. The importation of opium and coca leaves into the United States is restricted. The enforcement of the laws have however not prevented the importation of drugs for illicit uses. Introduction of narcotic drugs by smugglers cannot be prevented until other countries control the manufacture and export of narcotic drugs adequately. To this end our government initiated the movement which resulted in the calling of the International Opium Commission at Shanghai in 1909 and since then has continued in its efforts along these lines. The manufacture of narcotic drugs must be limited to approximate medicinal and scientific needs. Physicians must aid in the determination of such needs by limiting their own prescribing to indispensable uses. The pitiful character of the drug addict and the association of drug addiction with crime and other menaces to the public welfare demand all the help that physicians can give in solving this problem. (*Jour. A. M. A.*, May 9, 1931, p. 1623).

EPHEDRINE IN NARCOLEPSY.—The use of ephedrine sometimes results in sleeplessness. Whereas this effect might contraindicate the use of ephedrine in some circumstances, it has seemed to indicate its utilization in others. For instance, ephedrine has been found effective in counteracting the results produced by some of the barbiturates and of morphine. Ephedrine has also been used in the treatment of narcolepsy and its related phenomenon, cataplexy. (*Jour. A. M. A.*, May 9, 1931, p. 1626).

PIXSUL.—In reply to an inquiry regarding the composition of "Pixsul", the Pixsul Corporation, Atlanta, Ga., replied: "Pixsul is secret in composition." This should be sufficient to condemn it in the eyes of the medical profession. It is generally admitted and incorporated in the Code of Ethics that no physician shall use on his patients a preparation the composition of which is held in secret. The trade package of Pixsul bears recommendations typical of a "patent medicine" such as for eczema, ringworm, poison oak, toe itch, barbers' and parasitic itch—burns, bruises and insect bites. The product appears to contain both sulphur and tar. (*Jour. A. M. A.*, May 9, 1931, p. 1643.)

MAGNETIC BELTS.—The Council on Physical Therapy reports on the "Vitrona" and "Theronoid", stating that during the past four or five years there have been exploited to the public under various names solenoids for use in connection with the house electric light circuit, for the alleged purpose of curing or alleviating human ailments by means of magnetism. The Council points out that the original device of this kind was the "I-on-a-co" and that two of the most widely advertised and extensively pushed imitations of the I-on-a-co are, respectively, the "Vitrona" of the Rodney Madison Laboratories, Inc., and the "Theronoid" of the Theronoid Corporation. The Council describes the construction of these outfits and discusses the claim that the apparatus will magnetize the iron in the blood and that such magnetization will bring about the cure of many diseases and conditions. The Council states that it has been known for a half century or more that magnetism has no demonstrable effect on the human body and its processes. Because of many inquiries received, the Council carried out experiments with the

Theronoid and Vitrona. Independently, A. J. Carlson carried out experiments and found that the Vitrona produced no effect on energy metabolism. Other experiments were carried out all of which demonstrated that the Vitrona produced no effect on the human organism within the influence of the coil. Similar experiments with the "Theronoid" showed that absolutely no absorption of power by a human subject surrounded by the Theronoid could be detected. (*Jour. A. M. A.*, May 16, 1931, p. 1693.)

THERONOID AND VITRONA.—The old-time electric belts of our fathers' and grandfathers' days were crude affairs. They were to be worn next to the body and guaranteed to cure whatever ailed one. Quackery moves with the times. Human credulity is just as common a commodity as ever, but the methods of capitalizing it must, perforce, change with the times. The present-day successor to the old electric belt is the so-called magnetic belt. The first of these was put on the market by Gaylord Wilshire and called I-on-a-co. The I-on-a-co and its numerous imitations are simple solenoids—Coils of insulated wire that when plugged into the alternating current of the electric lighting system produce a fluctuating magnetic field within the coil. While it has long been known by scientific men that magnetism has no effect on the physiologic processes of the body and while it has also been known that magnetic permeability of the human body is that of air, the public does not know it—and that is all that is necessary from the standpoint of the quack. A number of imitations of the I-on-a-co have been exploited, among them being Theronoid put out through one formerly associated with Wilshire and Vitrona by one Madison formerly employed by the Theronoid Corporation. In 1926 the Federal Trade Commission issued a complaint against the promoters of Vitrona charging that the device has no curative or therapeutic value, action or effect. Later the Commission issued a Cease and Desist Order. (*Jour. A. M. A.*, May 16, 1931, p. 1718.)

OLD TUBERCULIN IN THE TREATMENT OF TUBERCULOSIS.—Koch reported tuberculin to the profession, in 1890, and it was hailed as a specific remedy; unfortunately, it was administered in a somewhat reckless way by inexperienced clinicians, and the disadvantages soon resulted in widespread condemnation. Tuberculin is not a selective curative remedy in the treatment of tuberculosis. It is not a specific. It should not be used by general practitioners in routine office practice, but by specialists in the sanatorium or home where there is careful clinical supervision of the patients. (*Jour. A. M. A.*, May 16, 1931, p. 1720.)

BISMUTH IN THE TREATMENT OF SYPHILIS.—In the selection of a bismuth preparation the different factors come up as to whether one wants a soluble or an insoluble preparation, how often the dosage is going to be given, and how rapidly it is desired to have the preparation absorbed. The average effective bismuth preparation should contain from 0.03 to 0.2 Gm. of metallic bismuth in a dose and a course of therapy lasting eight to ten weeks should probably amount to from 0.6 to 2 Gm. of metallic bismuth. The Council on Pharmacy and Chemistry has gone on record as opposed to intravenous bismuth therapy. The therapeutic dose is too close to the toxic dose; therefore one is limitd to intramuscular injections. If one is desirous of a preparation with comparatively rapid absorption and one that probably should be given twice a week, one might employ the thio-bismol in a dose of 0.2 Gm. (metallic bismuth, 0.075 Gm. per dose); or the potassium sodium bismuth tartrate, aqueous solution, usually with a dose of 0.1 Gm. (metallic bismuth, 0.04 Gm. per dose). These soluble preparations should be given twice a week and are hardly suitable for general office practice. When one administration per week is feasible only, one is forced back on the use of a soluble preparation suspended in oil, or an insoluble salt suspended in oil. Recently, there has been a turn to the use of liposoluble bismuth preparations; there is a claim that these combine the good points of both the soluble and the insoluble salt, but it is too early to answer this question definitely. (*Jour. A. M. A.*, May 16, 1931, p. 1721.)

THE CENSORSHIP OF MEDICAL AND DENTAL ADVERTISING.—One of the primary reasons for the establishment of the Council on Pharmacy and Chemistry of the American Medical Association in 1905 was the desire of the editor of *The Journal of the American Medical Association* for scientific advice concerning claims made by advertisers for proprietary remedies. The Board of Trustees of the American Medical Association give the fullest support to the Council by refusing space in the advertising pages of publications of the American Medical Association to advertisers of proprietary remedies who failed to meet the Council's requirements. With that support the Council has made its work and its name respected. The advertising pages of the publications of the American Medical Association and of the state medical journals that co-operate afford a striking contrast to the pages of the *British Medical Journal* and of the *Lancet* (London), which exercise a so-called censorship without, however, having behind the censorship the type of scientific study and control represented by the Council on Pharmacy and Chemistry. The Council on Dental Therapeutics of the American Dental Association began its work with high ideals and with enthusiasm. In 1930 the trustees of the American Dental Association adopted a resolution to place the association squarely behind the Dental Council in its efforts. Then, at the midwinter session of this association, held in February, 1931, the board of trustees practically reversed its previous action, placing the business manager of the periodical in a position of judgment over the council and making him arbiter as to whether or not the criticisms of the council shall be referred to the manufacturer. Without the power of the trustees of the American Dental Association and the periodical of the association whole-heartedly behind its work, the Council on Dental Therapeutics will be ineffective. (*Jour. A. M. A.*, May 16, 1931, p. 1697.)

EFFECTS OF FEMALE SEX HORMONE ON CONCEPTION.—Experiments on guinea pigs, made with a view of determining the effects of injections of the female sex hormone on conception and on pregnancy, showed that the female sex hormone is the active agent in producing estrus. In previous studies it had been found that injections of the serum from pregnant women would delay the onset of estrus in guinea pigs. These observations would seem to indicate an antithetic action between the female sex hormone and the corpus luteum hormone. Other experiments have indicated that the injection of the female sex hormone into pregnant white rats would terminate the pregnancy if it had not exceeded five days. Other investigators also, using white mice, were able to prevent conception and to interrupt pregnancy at any stage with comparatively small doses of the sex hormone. With guinea pigs small doses of the female sex hormone prevented conception and with larger doses it was possible to interrupt pregnancy and in some cases caused the death of the mother. (*Jour. A. M. A.*, May 16, 1931, p. 1698.)

SCIENCE AND THE ADVERTISER.—*Printers' Ink*, a journal for advertisers, is anxious to establish a "Forget Scientists Week": "Perhaps you have been so foolish as to think that scientists worked at the business of science. Not so. They test cigarettes, tell frightened mothers about breakfast foods, warn young men against the dangers of something that usually ends with -osis. Now and then to be sure they make an epoch-making discovery which will bring about an astounding revolution in the manufacture of nine-count, full-fashioned galoshes. In short, they are scientists of the advertising pages." *Printers' Ink* recognizes the dismay that has been aroused in scientists generally by the exploitation of pseudo science in advertising. It ridicules those who are now preparing copy for advertisements in modern periodicals because they are so utterly lacking in originality. Advertising in the periodicals of the United States has gone to lengths that have opened it to ridicule and censure. (*Jour. A. M. A.*, May 23, 1931, p. 1799.)

TUMS.—From newspaper advertisements it is learned that Tums are "the mint that relieves stomach distress." They are said to be "made with the very finest mint obtainable; contain extra ingredients that quickly drive away heart-burn, acid indigestion, sour stomach and gas." And, of course, the company does not pass up the public's present interest in halitosis. An analysis recently made of Tums indicates that this new marvel is essentially sugar and calcium carbonate (chalk flavored with peppermint. If advertised truthfully, and with the warning that "stomach distress" may mean not merely a temporary hyperacidity but possibly peptic ulcer or even malignancy, there might be a legitimate place in the home medicine cabinet for these peppermint-flavored tablets of chalk and sugar. But, unfortunately, if advertised truthfully, they would probably not sell. (*Jour. A. M. A.*, May 23, 1931, p. 1816.)

THE ELECTRO-CHEMICAL RING FRAUD.—In 1915 a post fraud order was issued against the Electro-Chemical Ring Company of Toledo, Ohio. According to the fraud order the Electro-Chemical Ring Company was a trade name under which Walter G. Brownson and his son, Edward G. Brownson, operated a fraudulent business. It consisted in selling rings made out of ordinary commercial iron for $2 under the claim that wearing the ring would result in the cure of such conditions as Bright's disease, diabetes, epilepsy, goiter, catarrh, cancer, etc. Subsequently attempts were made to continue that business under other names. In 1930, the scheme was revived under the name of "Walter Limber" and a fraud order has now been sisued against the name of "Walter Limber." (*Jour. A. M. A.*, May 23, 1931, p. 1816.)

EARLE LIEDERMAN, ONE OF THE "BIG MUSCLE BOYS."—The Federal Trade Commission has been doing some excellent work in the medical field by curbing the activities of some of the faddists, quacks and nostrum exploiters. The commission has been able to attack certain abuses in the medical field that could not be reached by the postal authorities or by the Department of Agriculture. One of the latest orders issued by the Federal Trade Commission has been in the matter of one Earle Liederman, one of the bare-torso, big-muscle persons, whose advertising might lead a puny store clerk to believe that by purchasing Liederman's "course" he may become a second Sandow. The commission investigated the business of Liederman and issued an order that he discontinue certain unfair trade practices which had been used in the sale of his "course." (*Jour. A. M. A.*, May 30, 1931, p. 1891.)

CHI-HO-WA, A FRAUDULENT RHEUMATISM CURE.—The Chi-Ho-Wa Remedy Company of Little Rock, Ark., is a trade name employed by H. L. Jones, a former railroad engineer, in selling a so-called cure for rheumatism —"Chi-Ho-Wa." Jones also received mail addressed "H." Jones" and "Box 147." The business was conducted from Jones' residence and consisted in the sale of an eight-ounce bottle of a preparation for which $4 was asked. When analyzed by federal chemists, Chi-Ho-Wa was found to be mainly alcohol and sugar. There were also certain resins and a very small amount of colchicine. Jones obtained his victims through newspaper advertisements. The postoffice authorities found the business fraudulent and a fraud order was issued against the Chi-Ho-Wa Remedy Co., H. Jones, their officers and agents, and Box 147, all at Little Rock, Ark. (*Jour. A. M. A.*, May 30, 1931, p. 1892.)

ABSTRACTS

INFANTILE ECZEMA

Lewis Webb Hill, Boston (*Journal A. M. A.*, April 18, 1931), states that in eczematous infants who are taking an exclusive milk diet, the assumption of a dietary cause forces one to the conclusion that some constituent of milk is causing the trouble. A considerable amount of evidence has accumulated to show that it is theoretically sound to feed eczematous infants on a milk free food and that it is often followed either by a cure or much improvement of the eczema. The difficulty has been that such a food has not been easily available, and the various homemade mixtures which have been used have not been tolerated well by the baby. It seemed to Stuart and the author that it would be worth while to try to develop an easily available and digestible milk free food for use in cases of milk idiosyncrasy and eczema, and with the help of Dr. James L. Gamble they worked out a formula. They then got the assistance of Mr. L. D. Johnson, of Mead, Johnson & Co., who had prepared for them a large amount of the preparation and christened it "Sobee". The product is a light brown flour of the following composition: soy bean flour, 67.5 percent; barley flour, 9.5 percent; olive oil, 19.0 percent; sodium chloride, 1.3 percent; calcium carbonate, 2.7 percent. Soy bean flour was taken as the source of the protein because it is rich in protein and because it has been carefully studied by a number of workers, who have found that it contains the correct amino-acids for growth. The result of these studies indicates that it can be used as the sole source of protein in an infant's diet. Olive oil was used as the extra fat because it is an inoffensive fat of easy digestibility, particularly when homogenized, as it is in this product, and sodium chloride and calcium carbonate were added because soy bean flour is somewhat deficient in calcium, sodium and chlorine. It contains an adequate amount of magnesium, potassium and phosphorus. It has been shown to contain vitamin B in considerable amounts, but its content of the other vitamins is probably not high. Orange juice and cod liver oil should always be given when the food is used. Sugar was not added because it was felt best to keep the carbohydrate low, on account of babies who might have a sugar tolerance, and because the physician prescribing the food could add any sugar he desired, according to the indications. When six level tablespoonfuls of the food are added to 7 ounces of water, the mixture has a "full strength" composition: fat, 2.8 percent; carbohydrate, 4.0 percent (starch); protein, 4.0 percent; salts, 1.0 percent. One fluidounce contains 17 calories. Unless the stools are loose a level tablespoonful of a mixture of maltose and dextrin is usually added to this mixture, which raises the carbo-hydrate percentage to approximately 7. Another method of feeding, which has been recommended in infantile eczema, is the use of heated milks. Prolonged or intense heating causes some change in the proteins which renders them less likely in a sensitized baby to cause symptoms. Evaporated milk has been heated to 240 F. in the process of manufacture and is much simpler to use than boiled homogenized milk. The author uses Sobee in all cases in which there is a positive skin test to milk protein or in very severe cases even if the skin test is negative, and in all other cases uses evaporated milk. He is convinced that these methods of feeding do better than any other, but most emphatically does not wish to give the impression that the problem of infantile eczema has been solved, and that it is only necessary to withdraw milk in order to effect a cure, for this is by no means so. The answer to infantile eczema has not yet been found. All one can say is that these methods of feeding help in a large enough number of cases to make them worthy of trial and represent one weapon to add to the armamentarium in dealing with this obscure and often discouraging disease.

HEPATITIS

John B. Deaver, Philadelphia (*Journal A. M. A.*, April 18, 1931), gives acute and chronic attacks, and chronic with recurrent acute or subacute attacks of infectious activity in the gallbladder region as forerunners of hepatitis, varying from purely degenerative changes to a mildly acute suppurative inflammation, to chronic fibrosing, specific tissue-destroying processes leading to early death from sepsis or to late death from toxemia and loss

of liver function, preceded by prolonged invalidism. The treatment of hepatitis is both operative and nonoperative. Operative treatment may be preventive or curative. To be preventive, it must be instituted early before the infectoin has traveled on its devious roads. This means that removal of the gallbladder alone ordinarily suffices. But when the infection has reached the liver, cholecystectomy is not sufficient. Nothing short of removal of the gallbladder together with T-tube drainage of the common duct will answer. If the latter is carried out comparatively early, it may still be preventive and head off a peripancreatic lymphadenitis as well as other sequelæ. If common duct drainage is not instituted until late, it may have to be continued for months.

STUDIES OF CALCIUM AND PHOSPHORUS METABOLISM

Walter Bauer, William T. Salter and Joseph C. Aub, Boston (*Journal A. M. A.*, April 11, 1931), have found that the very slow, intravenous administration of 20 cc. of a sterile solution of 5 percent calcium chloride promptly relieves the severe pain of colic caused by lead, or ureteral or biliary stone. The relief afforded by such therapy is more rapid and more constant than that by other forms of treatment they have employed.

SUMMER CAMP AS FACTOR IN CONTROL OF DIABETIC CHILDREN

Leonard F. C. Wendt and Franklin B. Peck, Detroit (*Journal A. M. A.*, April 11, 1931), regard every large city as a potential field for the development of a camp for diabetic children, which exerts a powerful influence on the morale and physical fitness of this special group. After an experience of five summers in the management of a camp for diabetic children, which has grown from a makeshift affair with four patients to the rather complicated organization of 1930, which was capable of caring for fifty children, they feel that this type of organizatoin fulfills a definite need and that the development of other camps for diabetic children is to be encouraged. The aim of all camps has been to get the child outdoors for a time and away from the parents, who may also need a respite from the constant watchfulness so necessary in the treatment of these diabetic children. The child is likewise entitled to a vacation such as is given others more fortunate. There is, however, another important factor involved, which outweighs all other considerations: namely, the psychology of the diabetic child himself. Overemphasis on a chronic disability during the formative period has in many instances led to the development of definite abnormalities of personality in these children. Anyone who has dealt with many of them realizes what a problem they often present. The child is not forced to give up his dependence and does not wish to do so. This dependence, coupled with a sense of physical inferiority, engenders an infantile type of personality. Some of these children are intelligent beyond their years, and most of them are emotional and subject to moods of depression and exaltation. The group as a whole is difficult to handle except in a summer camp.

PRACTICE OF TRAUMATIC SURGERY

Experience warrants the statement of John J. Moorhead, New York (*Journal A. M. A.*, April 11, 1931), that practically three-fourths of all traumas fall into the group of contusions, wounds, burns, joint injuries, fractures and dislocations. From the standpoint of management of these he believes that certain principles improve the results. Of these may be mentioned the following: Early treatment is important. If definitive measures can be applied within six hours of the onset, complications are minimized to such an extent that the disability period is halved. Mobilization rather than immobilization should be the aim, and if that is attained the need for prolonged physical therapy is minimized. Infrequent dressings limit the chances of secondary infection and also limit the probabilities of stirring up infection in the initial lesion. Delayed operation in infections is increasing his practice and he postpones intervention until localization is accomplished by the use of hot wet dressings, plus elevation and splintage. Operations in fractures and dislocations are featured only when the ordinary closed methods fail after reasonable trial. Anesthesia should be more universally employed. Local infiltration acts well in injuries of the joints. Spinal anesthesia has an established sphere in injuries of the lower extremities. Inhalation anesthesia (gas, oxygen or ether) is aided by the preliminary use of phenobarbital and like preparations. Intravenous anesthesia as yet is too unsafe and uncertain. For two years the author has been experimenting with a portable motorized device for setting fractures and dislocations and liberating stiff joints. He calls this the repositor. The apparatus essentially consists of an electromotor attached to a spring device, which in turn is fastened to a strap or harness attached to the limb. When the motor is started, the strap pulls and then relaxes, so that intermittent traction is applied to the limb instead of the steady pull that has hitherto been employed when manual methods or the fracture table have been used. A pull from zero to 100 pounds can be automatically given, with a variable period of relaxation and at varying speeds. Every fracture and dislocation is set not by setting the bone but by setting the elastic muscles, tendons and ligaments, and hence the importance of intermittent traction as compared with continuous traction. When used with the fluoroscope, this method should make the setting of fractures and dislocations almost automatic and the author is becoming convinced that this device is of value in that group ordinarily regarded as irreducible without operation.

RINGWORM OF FEET

William L. Gould, Albany, New York (*Journal A. M. A.*, April 18, 1931), emphasizes the importance of foot baths containing from 10 to 15 percent sodium thiosulphate in the treatment of ringworm of the foot. If the foot was not entirely immersed in the solution the results would not be so successful, because all the parts of harhoring the organisms would not be reached. Swabbing is usually done on the more apparent areas and not the more obscure, where the tinea may be just as plentiful as a constant source of reinfection. It undoubtedly is frequently not so much the medicament that fails as it is the mode of its application. The bath is unhandy at times, however, and a 20 percent powder of sodium thiosulphate in boric acid has been tried with much success on feet, footwear and floors. The powder is more easily applicable and as with the bath may readily be placed on the entire foot, especially between the toes, about the nails and beneath the soles. It is quickly applied to the sock and inside the shoe. A light dusting is all that is necessary. It has been found ideal at times to step into the bath and later use the powder locally. The powder may regularly be dusted on the feet and footwear night and morning for prevention and comfort.

CAUSE OF "PAINFUL BREASTS" AND TREATMENT BY MEANS OF OVARIAN RESIDUE

Max Cutler, New York (*Journal A. M. A.*, April 11, 1931), states that clinical, pathologic and experimental evidence clearly indicates that excessive epithelial and connective tissue hyperplasia giving rise to diffuse generalized pain and nodularity in the breasts in relation to menstruation may be due to excessive corpus luteum stimulation. In patients suffering from "painful breasts" the corpus luteum dominates the ovarian metabolism and by inducing an excessive epithelial and connective tissue

hyperplasia causes diffuse pain and generalized nodularity of the breasts. At the same time the overactive corpus luteum suppresses ovulation and exerts an estrus-inhibiting influence leading to a hypofunction of the follicular and interstitial elements of the ovary, as indicated by the short and scanty menstrual periods in these cases. The administration of ovarian residue apparently tends to cause a cessation of abnormal epithelial and connective tissue hyperplasia by counteracting the excessive corpus luteum secretion, thereby diminishing or removing its overstimulating influence on the breast elements. The administration of ovarian residue by mouth has resulted in relief of pain and tenderness in a number of patients suffering from this condition. A definite softening of the breasts and actual disappearance of painful nodules have been observed in some cases. The menstrual periods in many are restored to a more normal state and the general state of the patients is improved.

INTRAVENOUS USE OF EXTRACT OF LIVER

A readily prepared extract of liver (fraction G), hitherto administered by mouth, has been found by William B. Castle and F. H. Laskey Taylor, Boston *(Journal A. M. A.,* April 11, 1931), suitable for intravenous injection and highly potent in pernicious anemia. Maximal reticulocyte responses were obtained from a single intravenous injection of the amount of extract derived from 100 Gm. of liver. One of the patients so treated had failed to respond satisfactorily to the previous oral administration of a similar extract derived from 3,000 Gm. of liver given within a period of ten days. The possible etiologic and therapeutic significance of these observations is discussed.

SYSTEMIC REACTIONS FROM POLLEN INJECTIONS: THEIR CAUSES AND PREVENTION

George L. Waldbott, Detroit *(Journal A. M. A.,* May 30, 1931), presents evidence in support of the view that reactions from pollen injections are elicited by an excess of antigen absorption above the patient's individual tolerance. This effect may be produced by too fast absorption, such as an accidental intravenous injection, by the back-seepage of extract into a vein punctured accidentally, or by an overdose of antigen. Factors contributing to the effect of an overdose are: incomlpete absorption fo an injection given some time previously; absorption of additional pollen through the nose during the pollen season; absorption of substances other than pollen to which the patient is sensitive. The clinical manifestations of pollen reactions appear to be identical with those of reactions from injections of horse serum. From the observation of patients one gains the impression that if the reaction is accelerated it manifests itself as a shock which is very close to, if not identical with, the anaphylactic shock in the experiment with the guinea-pig. If the reaction is not violent enough to cause an anaphylactic shock, allergic manifestations, such as asthma, are produced, localization of which is likely to be determined by the presence of antigen in the affected parts of the body.

MESENTERIC INVOLVEMENT IN BUERGER'S DISEASE (THROMBO-ANGIITIS OBLITERANS)

Norman Taube, New York *(Journal A. M. A.,* May 2, 1931), discusses the history, etiology and pathology of the thrombo-angiitis obliterans. Special stress is laid on the distribution of the lesions other than of the extremities. Twenty-six cases from the literature of lesions affecting other blood vessels besides those of the extremities are tabulated. Two cases observed personally are added to the list. One patient had intestinal symptoms of mesenteric involvement which cleared up for a while, but later the patient succumbed to mesenteric thrombosis. The second patient gave evidence of involvement of the mesenteric blood vessels. He was evidently presenting symptoms of intermittent claudication of the mesenteric vessels and, the author believes, is the first case on record.

HOSPITAL TRAINING OF INTERNS

Harold L. Foss, Danville, Pennsylvania *(Journal A. M. A.,* March 28, 1931), maintains that irrespective of how well organized the intern service may be and of how great the effort put forth by the heads of departments to render the training of the most practical value, the greatest accomplishment will not be achieved without a certain basic principal being borne in mind. The young physician fresh from the medical school and entering his intern service begins now to practice more of the science than of the art of medicine. He is in the most formative period of his existence, keen to learn, wide-eyed and enthusiastic, trusting and hopeful, relying tremendously on the guidance of his chiefs, so much so that it places a great responsibility on them the significance of which none too frequently bear in mind. The student acquires a sense for scientific work only in his student days, and the degree of scientific training and interest imparted to the young man in the medical school *(and hospital)* determines his intellectual level for the rest of his life. Clinicians should fully appreciate their obligations as teachers, realizing that their role is hardly second in importance to that of the men who have guided the student during his college years and that it is their privilege by their precept and example, by their opportunity to stimulate his latent enthusiasm, by the inspiration of their own personalities to afford him in the most important phase of his professional career that guidance so important in molding and shaping and directing his destinies to the end that his life becomes a failure or a success largely as the clinicians choose to make it.



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ORIGINAL ARTICLES

POSTOPERATIVE COMPLICATIONS OF ABDOMINAL OPERATIONS AND THEIR TREATMENT*

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INDIANAPOLIS

Postoperative complications are in a large measure responsible for the morbidity and mortality that follow elective abdominal operations on patients in fair general health and presumed to be good operative risks. These unexpected complications are hazards that cannot be anticipated, but the possibility of their occurrence must always be foremost in the mind of a surgeon when handling a surgical patient. They constitute the most worrisome phase of operative surgery and are a constant harassing threat in an otherwise pleasant field of medicine. Presumably many of these complications can be avoided by proper preoperative care and careful surgical procedure. Surgical complications should in a measure be considered an error in judgment or faulty surgical execution. Just as prevention of disease is now occupying the field of progressive medicine, so in surgery prevention of complications is the best treatment. Modern surgical methods must continue to eliminate these complications as far as possible. Yet, even when meticulous care has been taken, still some complications will occur and in proportion to the earliness with which they are recognized and treatment instituted depends the successful handling of the complication. Necessarily, many of the statements that I will make are simple facts known to most of us, and in reviewing these complications I cannot treat each of them in detail. I have chosen this subject because it is a very interesting and at times a very perplexing one to me. It is of concern to everyone practicing medicine, although its consideration is usually pushed aside for the more spectacular field of operative procedure. Too much emphasis has been placed on the operation and too little on the preoperative and postoperative care. With the advent of the smaller hospitals in which the general practitioner is often entrusted almost entirely with the postoperative care it becomes more and more important that postoperative complications be discussed more freely so that every physician will recognize them early and be able to meet them or summon help. Another reason that these complications are discussed so infrequently, it seems to me, is that in a certain measure they are avoidable and imply that a mistake has been made and we all hate to discuss our errors.

Delayed Wound Healing. Delayed wound healing is a postoperative complication that may not menace the life of a patient yet it is very inconvenient and oftentimes delays the patient's convalescence from a few days to a few weeks. To the patient this is quite serious, although it may seem trivial to the surgeon. One cause of delayed wound healing is improper skin apposition . Too often we say to some interne, "Please sew up the skin", giving the impression that this is not important. It is just as important as any part of the operation and should be done well, no matter who does it. It is important that the skin edges be apposed properly with the edges turned out. Unfortunately, often they are rolled in and when the stitches are removed there is overlapping and poor healing of the skin. Whatever suture enables the surgeon best to properly appose the skin edges should be used, but it should be done carefully. I prefer an interrupted mattressed-on-edge suture, using a dermal suture material. Nonabsorbable sutures are much better because all experiments have shown less reaction around these sutures and, therefore, less tendency to the formation of stitch abscesses. Also, the sutures remain as long as they are desired. An interrupted suture allows one stitch to be removed if there becomes an infection, while the others remain. The suture I have mentioned fulfills all of these requirements and I am convinced that the proper suture to use on the skin is some form of nonabsorbable suture material.

Deep Wound Infection. Deep wound infection should be suspected when the patient begins an unexplainable temperature on the fourth to seventh day after operation. To detect the presence of a deep infection of the wound the incision should be carefully inspected and with aseptic care the wound should be grasped between the thumb and

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index finger and carefully palpated from one end to another, keeping the finger and thumb well back from the margin of the wound. If an indurated and tender area is found, suppuration should be suspected and with strict asepsis a probe should be inserted into the wound in this region. Even if there is no infection no harm is done, and if an infection is present it often can be drained and prevented from causing separation of the complete wound. I never have seen any reason for draining a clean wound as is sometimes done in case of obesity. To me that is an admission of the operator of a faulty technique or improper hemostasis. Draining material is a foreign body and invites infection. It is much better that the wound not be drained but frequent inspections of the wound be made and if serum collects or infection occurs it can be immediately drained and there has been no loss of time or injury to the patient. If the wound, however, heals promptly without drainage much has been gained. This rule, of course, cannot be followed when the case is one of frank infection.

Wound Separation. Wound separation is an occasional, but fortunately a rare, distressing occurrence with which every surgeon at times is compelled to deal. It usually occurs seven to twelve days following the operation. If complete separation occurs it is easily recognized and the patient must be taken back to surgery and the wound carefully resutured. This is best done, if the wound is not infected, by infiltrating rather wide of the wound with novocain, thus avoiding postoperative nausea of a general anesthetic which will again place a strain on the wound. At other times only a part of the wound separates, leaving a superficial portion intact. Often an inspection of the skin shows it well healed, without any evidence of infection when the fascia and deeper structures have separated. This will cause a future serious hernia. At times a knuckle of bowel gets incarcerated in a small area of separation, giving the patient obstructive symptoms the cause of which cannot be determined. Therefore, when a postoperative patient begins to show signs of obstruction and distention a careful examination of the wound should be made and if there is any question about the possibility of a deep separation of the wound, probing of the wound is justified. Whether the patient survives or not, wound separation is a calamity and should be avoided if possible. It is known that anemic, cachectic patients suffering with debilitating diseases, particularly the anemias, cancer and syphilis, are more apt to have wounds that show delayed healing. This class of people must have particular care in closing the wound and selecting sutures that will hold until the tissues have been reunited. It has not been my experience that syphilis is such a prominent cause of this condition as generally mentioned. The wounds of syphilitic patients heal very well provided they are under adequate medical treatment. Upper abdominal wounds seem to be more apt to separate because of the tension placed upon them. It seems to me that failure to properly suture the posterior sheath of the rectus muscle and bring together the split belly of the rectus muscle in incisions through the rectus muscle is a predisposing cause of wound separation, allowing fluid to accumulate in a trough and become mildly infected. Often this is the cause of the breaking down of the wound. It is known that some patients absorb catgut much more readily than others. This is a condition beyond our control, but the best of chromic catgut must be used in suturing up the fascia, with the fascia overlapped without any muscle or fat being between the apposed surfaces. When this is done we can be reasonably sure that separation will not occur if there is no wound infection. I still use deep so-called stay or safety sutures of silkworm catgut in extensive wounds and tie them rather snugly through rubber tubing. This has a tendency to eliminate the dead spaces and make one feel more secure should the catgut fail to hold. However, it will not prevent wound separation, because I have seen the sutures snap when all the strain was placed upon them. There are some disadvantages to the use of these deep stay sutures because in placing them in the wound oftentimes a hematoma forms and they may cause some slight strangulation of the tissues, although they should not be placed in that tight. It is, therefore, a question whether they are worth while. Careful suture of the wound layer by layer is probably much more important than the use of these sutures.

Postoperative Hemorrhage. Postoperative hemorrhages more than any other surgical complication imply surgical error, yet they occur after extreme care. The use of routine coagulation time and bleeding time tests have in a large measure removed the dangers of operating upon hemophiliac patients or so-called bleeders. Patients suffering with the anemias, leukemia, Banti's disease, and jaundiced patients are particularly apt to bleed following operation. Operations upon the stomach also, more than any other operation, seem to be followed by postoperative hemorrhages. In dealing with this class of patients extreme care must be taken to see that the patient is properly prepared by the use of calcium lactate to decrease the bleeding time and extreme caution at operation must be exercised in seeing that all bleeders are carefully ligated. Even then in the experienec of every surgeon doing much work postoperative hemorrhage will occur. If bleeding is profuse active surgical intervention must take place, opening up the wound and ligating the bleeder or packing tightly if ligation is impossible. Action must be definite and cannot be delayed or the patient may bleed to death. This condition must be differentiated from surgical shock, the symptoms of each are almost identical. Surgical shock, however, is not so common a condition as formerly, because long multiple operations have been eliminated, depressing deep anesthetics are not so

common, and more care is taken in the handling of the tissues. In individual cases, however, the possibility of shock must be considered, and a history of what was done will be of benefit in the differential diagnosis. The symptoms of hemorrhage are well known. Subnormal temperature, increasing pulse, thirst, pallor, anemia, low blood pressure and decreasing hemoglobin and red blood count. Unfortunately, the last two are not so much help until late because the blood is only lessened in amount and not diluted until eighteen to twenty-four hours after the hemorrhage begins. Blood transfusions and sodium chloride solution, intravenously or by hypodermoclysis, are the best measures to combat hemorrhage and shock when the hemorrhage has been stopped, otherwise they must be given cautiously. The introduction of a large amount of fluid volume into the blood circulation will elevate the blood pressure and tend to cause the hemorrhage to start up again. In the treatment of postoperative hemorrhage and shock the time to give a blood transfusion is when one begins to debate as to whether or not it should be given. A method should be employed that in the hands of the one giving it enables him to transfer the blood successfully into the veins of the recipient. Nothing is more upsetting than to attempt to do a blood transfusion and to be unsuccessful. Furthermore, extreme care must be taken that the bloods are compatible. I, personally, have tried several types of transfusion and believe that the Kempton-Brown method of transferring whole blood is the surest and safest way of always transferring the blood from one to another. Blood transfusion is almost a specific for postoperative hemorrhage or shock when given at the proper time. The use of blood coagulants, such as hemoplastin, are of little value, in my opinion, in checking a hemorrhage unless it be shown that the coagulation time is increased. The use of stimulants and other supportive measures must be used in treating these patients. Morphine is an excellent drug to cause complete relaxation and rest and should be given freely in the case of shock and hemorrhage. Adrenalin, given intravenously, in shock is only temporarily beneficial and the secondary vasodilatation is harmful.

Postoperative Vomiting. Vomiting is probably the most constant postoperative complication. The anesthetic used has considerable influence on the amount of vomiting that occurs after operation. Local anesthetics and regional or spinal anesthesia are followed by much less nausea than general anesthetics, and when it is particularly desirous that postoperative nausea be eliminated it is well to consider the use of these anesthetics. Spinal anesthesia, in my experience, is followed by very little nausea. Of the general anesthetics ether is probably the most common cause of vomiting. The use of sodium amytal as an adjunct to general anesthesia, supplementing it with nitrous oxide gas or ether, also tends to eliminate a certain amount of the nausea and vomiting. When vomiting does occur and is rather persistent gastric lavage is the best treatment. In my practice, however, I at first allow the patient water rather freely after the operation and if they vomit once or twice the stomach is emptied with less effort and discomfort to the patient than by gastric lavage. If vomiting persists, however, fluids must be withheld. Gastric lavage is not pleasant to the patient and is not without danger. When the patient vomits with the stomach tube in the esophagus, occasionally fluid is aspirated into the lungs. I am sure I have seen aspiration pneumonia result from this type of aspiration. Because of this and the discomfort to the patient gastric lavage is not a desirable routine procedure, but when vomiting is prolonged it must be done. Then the vomiting takes on a further significance and the presence of an acute dilatation of the stomach or intestinal obstruction must be considered a possibility.

Acute Gastric Dilatation. Just when a stomach can be said to be acutely dilated has always been a question to me. When the postoperative vomiting persists longer than twelve hours a dilatation should be suspected. It is probable that many or all stomachs are partially dilated after general anesthesia. It has been shown that the stomach usually does not regain its normal tone and peristaltic actions until approximately twenty-four hours after general anesthesia. In acute gastric dilatation there is gastric atony immediately following anesthesia and the stomach may not regain its tone until twelve to twenty-four days have elapsed. Payer in 1910 found this to occur in almost every one of three hundred patients whom he studied. Ruth, Lee and others have shown that dilatation may occur during operation. Lee, in his paper, reported a case in which death occurred on the operating table due to this phenomenon. He reported five other cases in which this occurred but did not terminate fatally.

Acute gastric dilatation most often occurs following a general anesthetic and more often follows ether anesthesia. It is more common following operations on the stomach but may occur following any abdominal operation. It is a very troublesome complication and is a comparatively common one. I am convinced that many patients survive mild gastric dilatation without proper treatment and without the attending physician recognizing the condition. I have seen autopsies reveal this as the cause of death, the condition previously unrecognized.

Acute gastric dilatation usually begins to manifest itself on the second day after operation, those cases occurring in the first twenty-four hours can hardly be estimated because vomiting due to anesthesia so often masks the symptoms. The vomitus at first is greenish then gradually becomes rather black and has a sweetish odor due to blood from the stretched stomach. Usually the patient gulps or spits up two to eight ounces of this fluid at frequent intervals without much effort. The stomach does not empty itself completely, but this fluid

is simply an overflow. The patient has distressing pain in the epigastrium with an anxious and restless feeling. The pulse gradually increases in rate and often the patient is suspected of having a failing heart. The patient also complains of thirst and collapse arises early and quickly becomes marked.

In order to avoid gastric dilatation Bartlett recommends frequent postoperative gastric lavages, especially following operations upon the stomach. Measures that may prevent a certain proportion of these dilatations are: (1) Avoiding preoperative vigorous catharsis, (2) careful preparation of the stomach by small feedings the day previous to operation, (3) the use of anesthetics other than deep ether narcosis. The most valuable treatment of this condition when once it exists is frequent gastric lavage.

Since the condition has been recognized earlier and treatment instituted the mortality rate has been decreased from almost 100 percent to about 25 percent. Death may occur quickly from this complication, but it usually occurs after several days.

The stomach may be washed every two hours with the large stomach tube, but more recently I have found that it can be done with greater success and more comfort to the patient by using the small Rehfuss tube, leaving it in place and keeping the stomach constantly empty.

The patient should be placed upon the stomach and should be kept there with occasional shiftings to the knee-chest position and the left lateral prone position until the condition abates, according to DaCosta. This postural treatment may be modified somewhat, but the essential part of it is that the patient should lie for a considerable portion of the time on his stomach. Gastric enterostomy has been advocated and employed by Mayo-Robinson. However, others state that operative procedures are contra-indicated and the weight of evidence at present is against any operative procedure. It frequently occurs as a complication of gastro-enterostomy. Nothing should be given by mouth until the symptoms have abated. Of all drugs, pituitrin is the most efficacious. There are many theories as to the cause of this condition, but their discussion cannot be freely covered here.

Acute Bowel Obstruction. Acute bowel obstruction is a formidable surgical problem and as a postoperative problem occurring three to ten days after operation it is one of the tragedies of the practice of surgery. It is best considered with so-called adynamic ileus because almost always it is a question whether the abdominal distention and vomiting are due to mechanical obstruction or paralytic ileus. Stimulated by the work of Haden and Orr a rather large number of experimenters have been working recently and somewhat concurrently on the subject of bowel obstruction. Gatch and Trusler have published the results of their experiments and have given a very concise and comprehensive classification of bowel obstruction, the cause of death and rational treatment.

Intestinal obstruction may occur along the course of any portion of the intestinal tract, but because the small intestines are longer and more freely movable most obstructions occur in various portions of these intestines. Every precaution must be taken at operation to prevent adhesions by carefully peritonizing all raw surfaces, keeping dry gauze from contact with the intestines and by careful handling of the abdominal contents. Elimination of the drainage material also when possible will diminish the probability of massive adhesions and potential cause of bowel obstruction. It is gratifying to note that abdominal drainage postoperatively is becoming a less frequent procedure. I have some very definite ideas concerning drainage of the abdomen and believe the old saying of, "When in doubt drain," should be changed to, "When in doubt don't drain". The only indication for drainage is a localized abscess of purulent pus and in gall bladder surgery where it is problematic whether the cystic duct will hold after removal of the gall bladder and ligatures of the duct.

For several years I have closed the abdomen without drainage following gun shot wounds through the intestines, and suturing of perforated peptic ulcers when the operation was performed early and there was no area of frank pus. Drainage of the abdominal cavity and peritonitis is futile as noted clinically and as shown experimentally years ago by Dr. Frank B. Murphy and others. Within twenty-four hours the drain is firmly surrounded by adhesions, walling it off from the rest of the abdominal cavity, then that small cavity alone is drained. There always is some drainage when a drain is used, due to the reverse lymphatic flow caused by the presence of a foreign body. When it is necessary to drain an abscess soft rubber tubing or Penrose drains are preferable. So-called cigarette drains should never be used unless there is oozing that cannot otherwise be controlled. The gauze packs stop oozing; likewise, it soon becomes filled with dried serum and obstructs the drain. It also adheres to the intestines and is a basis for further trouble. Its removal at times is so painful as to necessitate an anesthetic. When it is used it should be left six or seven days because by that time it has begun to act as a foreign body and the tissues have thrown out an inflammatory membrane about it, allowing it to be removed without so much adherence to the tissues. All other drains should be removed in about seven days by removing gradually when possible. If the drain can be taken out at the end of thirty-six hours it was unnecessary in the first place, or an abscess may form deep in the tract with the upper portion of the tract closed over.

To determine whether an obstruction is mechanical or whether it is an ileus is often a surgical, diagnostic problem which often requires all the

skill and mature judgment of a competent surgeon. Every diagnostic aid must be used to ascertain the true condition. If a mechanical obstruction exists it is imperative that surgical intervention occur before it is too late. When all of the classical signs are present and the diagnosis is no longer in doubt it is probably too late to save the patient's life, yet the surgeon must be reasonably sure that an obstruction exists before he dare advise another operation. As one author puts it, after a patient has undergone the mental and physical strain attendant upon a severe surgical operation and has just begun to feel the satisfaction and physical benefits consequent upon having passed safely through such an ordeal, to be called upon again to submit to a further and greater surgical hazard is to stretch almost to the breaking point the fortitude and physical endurance of the patient.

In obstruction the distention is more or less regional, depending on the site of the obstruction. If the obstruction is high in the jejunum there may be very little distention and if it is present it will be high up on the left side. Auscultation of the abdomen is a valuable aid. There are periods of vigorous peristalsis in cases of mechanical obstruction while in ileus the abdomen is more or less quiet.

A flat x-ray picture of the abdomen is often of great help in establishing a diagnosis of bowel obstruction. According to Case two types of bowel outline may be described: (1) "Herring-bone appearance", due to the gas causing the folds of Kerkring to stand out by contrast, giving a feathery or slashed appearance to the intestinal loop; (2) "ladder arrangement" of the shadow of the bowel coils when the distended loop lies parallel. The latter appearance is pathognomonic of acute obstruction requiring immediate surgery. The herring-bone appearance does not denote as greatly distended small bowel and may appear and disappear without surgical intervention. Oftentimes the picture will show distended coils in one region of the abdomen and not in the other and give a clue as to the site of the obstruction. Since most of the obstructions are in the small bowel a picture showing a colon distended with gas eliminates obstruction higher up as a possibility. When a diagnosis of acute bowel obstruction can be established early and the patient can stand it the most desirable thing to do is to reopen the abdomen and remove the mechanical obstruction. There is difficulty, however, always to make such a diagnosis. Furthermore, the situation usually is one in which the obstruction is a combination of an ileus with obstruction. Often there is a more or less localized peritonitis in the region of the appendix or pelvis with an ileus of the bowel in this region and pocketing of the gas in the bowel, causing obstruction of the upper loops.

While observing an abdomen after an operation and trying to determine what is the cause of the distention and ileus there are certain definite things that should be done and others that should not be done. Certainly drastic catharsis or hypodermics of surgical pituitrin have no place in the treatment of a suspected bowel obstruction or in an ileus due to any inflammatory process. Perforation of a damaged bowel may result from the use of either of these. These patients should be treated by moist heat packs to the abdomen, rather frequent enemata, gastric lavage, withholding fluids by mouth and frequent intravenous or hypodermoclysis injections of sodium chloride solution. Glucose solutions may be used intravenously to furnish food to the patient. Frequent determinations of blood chlorides should be made to see that no hypochloremia exists. Sufficient chlorides must be given to maintain the normal chloride content of the blood.

Gatch and Trusler have shown that in simple bowel obstruction death is due to the loss of chlorides as a result of excessive vomiting and patients can be kept alive for a considerable period of time by the injection of large amounts of sodium chloride into the blood stream. However, most cases of bowel obstruction are complicated, as they have shown, by distention and gangrene of the bowel and death in these cases is caused by the absorption of highly toxic products from the distended intestines even when the normal chloride content of the blood is maintained. Therefore, in cases of ileus where there is peristalsis of the upper bowel still present and in late mechanical obstruction a jejunostomy is a life-saving procedure. It is made through a high left rectus incision under local anesthesia. A Witzel jejunostomy, using an ordinary catheter, pulling the tube through the omentum and suturing the intestine to the abdominal wall with two sutures is the most desirable form of jejunostomy. This will drain the toxic products from the intestinal tract high up and can be used to administer fluid to the patient if desired. This is also a very valuable procedure and often life saving in cases of badly neglected appendicitis with rupture, peritonitis and intestinal stasis. Some men prefer in cases of appendicitis with localized peritonitis and distention, at the time of operation, to do an appendecostomy, inserting a catheter through the stump of the appendix, realizing that it is desirable to drain the distended bowel. Brooks uses this procedure freely and claims excellent results. This may be of considerable value when the cecum is distended, but usually it is the lower two or three feet of ileum that is kinked about the appendiceal abscess and more efficient drainage is established by an opening into the intestine higher up and above the inflamed and kinked intestinal coils. In individual cases the surgeon must decide the most suitable portion of the bowel into which the opening should be made, bearing in mind certain facts. A jejunostomy more certainly drains the small intestines and should be used in doubtful situations. However, the higher the opening into the

intestinal tract the more active is the digestive power of the intestinal contents, and if a fecal fistula results when the tube is removed there will be more trouble with digestion of the wound and excoriation of the skin the higher the enterostomy is located. A Witzel is supposed to close automatically immediately after removal of the tube, but this does not always occur. Furthermore, nutrition is better maintained the lower the enterostomy, since more intestine is functioning. Therefore, it is advisable to make the enterostomy as low in the intestinal tract as possible, provided it efficiently drains the small intestines.

It is my opinion that most of us have neglected this very valuable procedure of opening the intestines and relieving the distention by enterostomy when many times it would save the patient's life. More recently I have used it with excellent success and without any bad results attributed to the procedure. One should not wait until the patient is moribund before doing it, but should perform the operation when there is still chance of saving the patient's life.

When a fecal fistula has resulted from an artificially produced enterostomy or as a complication of an acute inflammatory process, such as gangrenous appendix, there is a general rule that the fistula will close of its own accord provided the intestinal tract is open below the fistula. This is usually true unless carcinoma, tuberculosis or syphilis are present. Occasionally this rule does not hold, and after several months of expectant treatment, using a diet of small residue and avoiding drastic cathartics, it is necessary to close the fistula surgically. This is an unusual experience for an enterostomy to remain open and require surgical correction. It will usually heal when inflammation has subsided and the obstruction below has corrected itself or has been relieved by surgery.

Localized Abscesses. When a patient continues to run a temperature postoperatively, especially after operations for gangrenous appendicitis and similar operations, repeated rectal and vaginal examination should be made to see if there is not a pelvic abscess pointing into the vagina, or into the rectum in case the patient is a male. If the drainage wound is still open, careful introduction of a long hemostat and gentle blunt dissection may drain a pelvic abscess. This must be done with exceeding care, if attempted. When an abscess is discovered and does not drain through the wound, and when it becomes sufficiently fluctuant, it can be treated successfully by the introduction of a pair of scissors bluntly through the cul-de-sac or through the rectum, and by blunt dissection drainage can be established successfully. This is often a surprisingly successful way of treating such an abscess, and is often nature's way of treating a neglected appendiceal abscess.

The possibility of a subphrenic abscess being present, when a septic temperature persists, should be kept in mind. This occurs most commonly after ruptured peptic ulcers and may also occur as a complication of a ruptured appendix or other forms of peritonitis. The x-ray is a valuable aid in diagnosis, showing an elevated and fixed diaphragm on the affected side, but oftentimes even after careful physical examination and x-ray the only method of arriving at a definite diagnosis is by means of paracentesis, which can be done without any harm to the patient. When a subphrenic abscess occurs, it is best drained by a two-stage operation, through the lower right thoracic cavity, taking especial care to avoid producing an empyema.

Postoperative Pulmonary Complications. It is obvious that I cannot more than briefly touch upon this extensive subject in this paper, but I desire to mention a few points that are of practical importance in studying these complications.

Pneumonia has been for years a constant postoperative source of worry to the surgeon and patient as well. It was spoken of as aspiration pneumonia or ether pneumonia for years until the embolic theory became prominent. In 1920 Cutler and Hunt attempted to prove that emboli were the cause of almost all postoperative complications. Recently atelectasis or massive collapse has been found in many of these pulmonary complications and we are again confused as to the exact causes and pathology of these chest complications. Voluminous writings and extensive experimentation have been done on this subject during the past few years since the recognition of atelectasis as a common postoperative complication. The work of Coryllos as recently published, it would seem to me, gives a very clear and concise explanation of most pulmonary complications.

There are two main types of pulmonary complications—pulmonary emboli and atelectasis often with a pneumonitis or atelectatic pneumonia. Pulmonary emboli occur usually in the second week after operation. The symptoms are very sudden in their onset, with pain, dyspnea, and often sudden death. If the embolus is smaller usually an infarct occurs and it may clear up in a few days, causing some slight area of consolidation, slight pleurisy and one to three degrees elevation of temperature.

The pulmonary complications occurring within the first forty-eight hours after operation present a different picture than this. They have been attributed by Cutler to small or minor emboli. However, according to Coryllos they are due to different causes. He attempts to prove that postoperative bronchitis, atelectasis, and pneumonia are evolutional phases of one and the same postoperative pathological process—bronchial obstruction. If his conclusions are correct practically all of these conditions arise as a result of the plugging of a bronchus by mucus that is not expelled. As a result the alveolar air is absorbed, causing the atelectasis, and pneumonia develops, depending upon whether the plug is expelled or not, and if sufficient virulent pneumococci are already present in the alveoli of the atelectatic lung.

There are several factors in abdominal surgery that tend to influence the retention of bronchial secretions in the bronchi. First, when the abdomen is opened there is a distinct lessening of the vital capacity of the lungs as shown by Head and Powers. This is due mainly to an elevation of the diaphragm and is more marked when the operation is upon the upper abdomen. Furthermore, the coughing reflex is suppressed by anesthesia, narcotics, pain, posture and splinting of the thorax and respiratory muscles. It is logical to assume as a result bronchial secretions that are normally expelled will be retained and block a bronchus in a patient in this situation.

Atelectasis starts within the first twenty-four or forty-eight hours after operation and is accompanied by cyanosis, excessive perspiration, diminished breath sounds, occasional moist rales and more or less elevation of temperature, depending on the extent of the pathology. X-ray pictures show an elevation of the diaphragm and displacement of the mediastinum toward the affected side and an area of consolidation usually limited to the lower lobe and more often involving the right than the left, according to statistics that are available. Similar x-ray findings are present in definite lobar pneumonia as Coryllos has shown, and he states that we have considered that the lung has expanded in pneumonia because we compare the lobes at autopsy when the healthy lung has collapsed, leaving the diseased lung to appear the larger, when in fact the diseased lung may be smaller than it was before the pneumonia occurred. What are the values of these newer conceptions, if any? They certainly give the surgeon a more hopeful outlook than if all pneumonias are embolic in origin. In that situation the surgeon felt more or less hopeless, but now there are several things that theoretically can be done to prevent these complications. First, an operation should be postponed if possible when a patient has a common cold or bronchitis. Second, infections about the mouth, such as teeth and tonsils, should be cleaned up if possible before major operations are attempted. This theory gives a scientific basis for an already known clinical practice. Agents that suppress the coughing reflex over a long period of time should be lessened as much as possible. Prolonged deep ether anesthesia certainly should be eliminated.

The use of carbon-dioxide and oxygen at the end of an operation, especially abdominal, to increase the respiratory movements and keep the patient in a condition of deep breathing for three to five minutes is probably the best agent to prevent atelectasis and should be used more freely. This procedure also should be used in the treatment of the condition when once established. Measures to induce coughing, such as turning the patient on the unaffected side, should also be tried. In delayed atelectasis when coughing and expectoration are neither present and cannot be induced, bronchoscopy with aspiration of the affected bronchus has been recommended and tried with excellent results. It seems a bold measure at present, but should be tried in desperate cases.

In conclusion I want to say that I have discussed briefly some of the more common postoperative complications, with the thought in mind that they should be given more study by all physicians at all times. They should be considered more particularly from the standpoint of prevention and early recognition when they do occur. I have not presented any unusual or new surgical ideas. My plea is for more deliberate and careful surgery, keeping these facts in mind. To those of you who have been well initiated into this field of surgery by encountering many of these harassing and unwelcome complications, these remarks may only recall unhappy experiences, but I trust that there are some present with less experience who will be stimulated to give considerable study to these disturbing situations and may be aided in doing so by these few remarks.

DERMATITIS HERPETIFORMIS*

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Of all the dermatoses presented to the dermatologist, that group of skin diseases the eruptions of which are characterized by the formation of successive crops of well-defined vesicles or bullæ are the most interesting, and fortunately the most rare. These dermatoses also are usually the most resistant to treatment and at best offer only a fair prognosis.

The most important skin diseases found in this grouping are: (1) erythema multiforme, (2) all types of pemphigus, (3) certain types of herpes and herpes zoster, and (4) dermatitis herpetiformis, commonly known as Duhring's disease.

The chief clinical symptom of all of these diseases is the formation of successive crops of vesicles or bullæ. The association of this symptom with the central nervous system is most remarkable and almost always a constant factor. Particularly is this true of dermatitis herpetiformis, a case of which will be presented.

Dermatitis herpetiformis may be defined as a rare and usually chronic or relapsing inflammatory disease of the skin. It may occur with or without any systemic disturbance. It is characterized by an eruption of the papular, vesicular, or bullous variety. The lesions usually show a distinct tendency toward grouping. They are almost always accompanied by intense itching or burning at the site of the lesions.

Although the disease may occur at any age, it is most common between the ages of thirty and sixty. Both sexes are about equally affected. The disease is essentially neurotic in origin. It fre-

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quently follows some severe mental strain or a nervous shock, especially if the nervous shock is accompanied by physical trauma. Auto-intoxication or a septic agent is occasionally given as a cause. When seen in women it is most often during a pregnancy and then usually clears up completely when the pregnancy is terminated.

The pathology of the disease is that of an acute inflammation beginning in the upper layer of the corium, or the deepest epidermic layer. This results in vesicles forming beneath the epidermis. These may either gradually or quickly enlarge and work upwards, the epidermis becoming secondarily involved. The lesions so formed often contain a fibrous network in the meshes of which are found polynuclear leukocytes in large numbers and some eosinophiles. From seven to fifteen percent eosinophiles are often found in making a differential white count.

The diagnosis of this disease is made by the character and distribution of the lesions, by their chronicity, by their tendency to occur in crops, and by the subjective symptom of itching. The tendency of the lesions to appear in symmetrical bilateral groups is the most important feature of the diagnosis.

The prognosis of the disease is only fair. Remissions are the general rule and a permanent recovery is the exception. Those cases occurring during a pregnancy have the best outlook. When the bullæ assume a pustular or hemorrhagic tendency the prognosis is grave.

The treatment of the condition is of course both local and general. The local treatment consists in the thorough draining by incision of all blebs and vesicles and the application of antipruritic lotions or ointments as needed. A mild antiseptic ointment may be used to good advantage to keep down secondary infection. The general treatment is directed along the lines of securing good elimination and to the bringing about of a more healthy and vigorous nerve tone. This is accomplished by changing the surroundings and the mode of living and by the use of suitable tonics.

The case presented tonight represents one the etiology of which was in a known definite mental and physical shock, a case in which there were between twenty-five and thirty generalized crops of lesions. Each crop of lesions contained from fifty to 1,000 blebs. The perfect symmetry of the bilateral distribution of these lesions can only be accounted for by some involvement of the central nervous system.

Picture, if you will please, a somewhat obese, white male, about fifty years of age. A bachelor of sedentary habits whose only taskmaster and whose chief pleasure is in his work and whose work is a constant drain on his nervous reserve. A man whose past has been devoid of any serious sickness or accident, and whose health has always been apparently of the very best. A man who has not been exposed previously to any great mental or physical shock.

This man, late one night about four months ago, was in a serious automobile accident—one of those head-on collisions in which you have plenty of time to realize that the crash must occur and also time to realize that you are powerless to prevent its occurrence. This head-on collision did occur. The automobile turned over three times and the man suffered a great mental and physical shock and some physical injuries, the most important of which was to his left leg. The injuries consisted of a sprained left ankle and a crushing of the muscles in the left lower leg. He was removed to a hotel in Richmond and six hours later his left leg was swollen to twice its normal size and showed evidence of subcutaneous hemorrhage. The pain was so severe that he had to remain in bed and the injuries were treated by hot applications. About eleven days after the accident a tumor mass in the left leg was aspirated of about one-half pint of serosanguinous fluid.

About two weeks after the accident the patient complained of a generalized itching, but most marked about both ankles, both knees and both posterior axillary folds. Twenty-four hours after he first noticed the itching, an eruption appeared in the form of small round or oval shaped vesicles and blisters which contained a clear fluid. These came out in great numbers and were located chiefly in the regions where the itching had been most severe. When they first appeared, these vesicles and blisters were pin-head in size and seemed to arise directly from sound skin. There were probably a thousand of these lesions present at one time. A few days later they averaged in size from one-fourth to one centimeter in diameter and were arranged in well-defined bilateral groups. For the most part the bullæ were thin-walled and contained a clear water-like fluid. A few days later some contained a sanguinous fluid while still others were distinctly hemorrhagic in nature, and a few even contained clotted blood.

New lesions continued to form. Old lesions would grow larger and coalesce with neighbors forming some blebs up to three or four centimeters in diameter and of irregular shapes and sizes. Some of the larger blebs would rupture spontaneously and when they did so, a thick tenacious scab would form at the site of the lesion.

Two weeks after the skin eruption began the patient was admitted to the Methodist Hospital. The physical examination at this time was essentially negative except for the skin eruption as described and a very obvious mental depression. Whenever the accident was mentioned or the lesions attended to, he would cry. The Wassermann test was negative, the urine examination normal except for a trace of albumin, and repeated differential blood counts showed a seven to ten percent eosinophilia. Temperature was always normal.

The local treatment instituted during his hospital stay was to remove all of the thick, tenacious crusts by soaking them in olive oil and washing

them off with soap and water. All bullæ were incised freely, using a Bard-Parker knife, and whenever possible the tops of the blebs were removed with the scissors. Locally a five percent ammoniated mercury ointment was applied liberally to the lesions and then they were covered with a gutta-percha paper before bandaging. Fresh dressings were applied twice a day.

The general treatment consisted in the varied use of suitable tonics and to the securing of better elimination. A great deal of effort was made to improve the severe mental depression. Business worries were side-tracked, and only cheery visitors admitted.

Progress during the first week in the hospital was very slow. New crops of bullæ continued to form. However, the older lesions showed a tendency to heal.

The second week improvement was noted. While new crops of blebs continued to form, they were smaller in size and number than each preceding crop. Some of the older lesions showed complete healing by this time.

The third week there was a very noticeable improvement in his mental state, and a corresponding improvement in the disease. Only a few new blebs would form each day. These were not so deep-seated as the earlier ones and healing occurred much more rapidly.

During the fourth and fifth weeks progress was very rapid. Almost all of the old lesions were healed and not more than five to ten new blebs would form in a day. His mental depression was rapidly becoming normal.

At this time it was thought he had sufficiently recovered to be sent to his home. Due to the excitement of the trip home and to the changes in his regular routine of treatment, he became somewhat mentally depressed again, and there was a corresponding relapse in his skin condition. Several new crops of bullæ appeared. Fortunately, they were of the less severe type and showed a tendency to heal promptly.

During the last five weeks he has been under the same system of treatment that he was under while he was in the Methodist Hospital. His mental depression has about disappeared, and his skin is behaving normally. The patient is much encouraged and expects to return to work soon.

I believe the ultimate prognosis to be good and the chances for relapse will be lessened as more and more time passes from the date of the original injury.

This case is especially interesting, not only because of the infrequency of occurrence, but because it is such a striking example of the influence that the nervous system has on lesions of the skin.

THE TREATMENT OF CUTANEOUS BURNS

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Extensive cutaneous burns are always serious injuries, regardless of whether or not the deep structures are involved. The complicating factors are many and so variable that a constant reorganization of treatment is necessary. We now believe that the early symptoms are due to toxemia and the associated shock, although blood changes and interference with normal skin functions usually contribute to the initial hazard. Some facts regarding the processes involved in the period immediately following a burn are established. There is absorption of split protein products, alleged by some to be primary and secondary proteoses. There is marked concentration of the blood. Hemoglobin readings of 150 to 209 percent have been recorded and are said to cause a failing circulation with the tissues becoming oxygen starved. Such concentration may be followed by a rapid, thready pulse, fall in temperature, cold clammy skin, coma and death in a few hours. The leucocyte count may reach 40,000 to 50,000 or more and the blood chlorides are greatly reduced.

In addition to toxemia and shock in which dehydration is an important, if not an essential, feature the burned patient is subjected to all the risks of infection. And last of all he is menaced by the contractions due to vicious scars, keloid formation, or tendon involvement and by the disability from prolonged disuse. These dangers if they do not threaten life may lead to permanent crippling or to a long period of disability and suffering.

Methods of treating cutaneous burns include:

(1) Attempts to arrest the autolytic process.

(2) Attempts to remove the products of decompensation mechanically or by baths.

(3) Various measures to slow the absorption of toxic products such as the use of vaso-constrictor drugs.

(4) The local coagulation of devitalized tissue.

Surgical removal of the burned tissue, perhaps in connection with one of the above methods, has also been practiced. The mortality following this debridement has been distinctly higher and it has consequently lost favor. To be effective it needs to be done promptly and anesthesia is usually necessary. It has not proved good practice to subject a "shocked" and very ill patient to it. It also means the destruction unnecessarily of many skin glands which otherwise may act as centers of epithelial regeneration. Loose tissues are freshly opened and spread of infection is invited. Debridement for burns seems to have a limited indication in deep burns which involve a small skin area.

The use of both the open air and wet dressing methods has produced good results, while the use of greases and oils is probably the worst form of early treatment of burns. Paraffin dressings are perhaps a little better than greases but are without any pronounced advantage. Greases have one great disadvantage in the early treatment of burns. They seal in the bacteria which are invariably present and allow their growth and consequently encourage infection. Open air and wet pack methods are usually superior in combating infection, but the benefits of toxin fixation are not available from either of these. Protectives have a place in the granulation stage provided infection is not a serious factor.

The most marked improvement in the mortality from burns has resulted from the use of fixatives, such as tannic acid. Davidson[1], who developed the method, is credited with having produced a method of treatment far superior to any previously used. Enough time has elapsed since the introduction of this treatment to learn whether the early enthusiasm was justified and to find out what results have been obtained by different men in their independent use of it. These reports are almost without exception favorable. Most of them show a marked decrease in mortality and all of them state that the patient is more comfortable. The management is less troublesome also.

Bancroft and Rogers[2] of New York, Seeger[3] of Milwaukee, Hunter[4] of Canada and Gordon[5] of England, all report enthusiastically upon the use of tannic acid.

Goldblatt[6] prefers open air treatment. It is not apparent from his report that tannic acid was used in any of his cases. He suggests that tannic acid may be objectionable in that—

(1) It may devitalize tissue which otherwise would not slough;
(2) That it may invite infection, especially with anerobic organisms;
(3) It may promote autolysis since an acid medium is said to do so.

He believes its use should be limited to selected cases and never considered in the presence of infection. Anyone who has used tannic acid will not be impressed by these notions. A burn at the time of occurrence is a contaminated wound the same as other accidental wounds. Infection is not established and in most cases will not be if the tanning is accomplished promptly and effectively. A preliminary cleansing with ether is probably a worthwhile measure. Tschmarke[7] has treated cutaneous burns by scrubbing with soap and water under general anesthesia with excellent results (a conservative form of debridement). Ether is an effective cleansing agent which can be used gently and usually effectively without an anesthetic.

Tannic acid has the following advantages: It combines rather promptly with burned tissue to harden and tan it. It actually converts wet gangrene to dry gangrene, which is axiomatic in the surgical treatment of any gangrene. This reduces greatly the absorption of split protein products and hence diminishes the toxemia. It helps prevent the enormous loss of fluid which otherwise occurs from the burned surface. It also by the conversion to dry gangrene largely prevents, and may entirely prevent, infection. This fact deserves especial emphasis, because many times the destruction of tissue, especially of skin, is caused more from the infection supervening than from the burn itself. The dangers of subsequent sepsis are greatly minimized. Also the tanned membrane acts as a splint to undestroyed epithelium, which grows rapidly underneath it in the absence of infection. If all epithelium has been destroyed, serum tends to lift up the tanned membrane in a few days. Granulation is then beginning and the membrane should be removed. The treatment then is that of any granulating wound. Sloughing tissue harboring infection is not present, and the granulations are cleaner than those which develop in an infected wound. This enables one to do skin grafting almost immediately, which is imperative if contractures are to be prevented. Of course sepsis under the membrane does sometimes occur especially about the perineum and buttocks and also about the face. If it occurs the membrane must be removed.

To avoid ugly and vicious contractures early grafting must be done. Thiersch grafts are most efficient for this purpose, although in some areas it is necessary to later excise the Thiersch graft area and replace with a flap or tube graft or Wolf graft. Thiersch grafts are cosmetically poor and for wearing surfaces are painful. Keloid formation is much less pronounced in the absence of infection.

During the stage of shock it is necessary to relieve pain, supply heat and stimulation and institute measures to elevate the blood pressure. Intravenous fluids may or may not keep the blood pressure at a safe level and blood transfusion may be indicated to tide the patient over the first few hours. Blood transfusion is often neglected in this phase of treatment when it could be used to the greatest advantage. It is also a life-saving measure late in the course of a burn when sepsis has weakened the patient.

In from twelve to forty-eight hours the burned areas treated by tannic acid become dry and hard and pain is relieved. The patient having been placed on a sterile sheet with a tent and heat lamps over him may turn about in any position with comfort. The burned areas do not stick to the bed clothes and the utmost freedom of movement is permitted. It encourages the use of extremities which minimizes the damage due to prolonged non-use. The prolonged immobilization which is otherwise necessary or unavoidable due to the unwillingness of the patient to move and use a burned extremity is prevented or at least greatly shortened.

The early beginning of active movements prevents the part from becoming more or less "lymph

bound", prevents tendon and joint damage from non-use and prevents largely muscle atrophy from the same cause.

I am sure that no one contends that tannic acid constitutes a complete treatment for burns. Neither is it perfect in the sense that it cannot be improved upon. A complete treatment must include first of all measures to prevent the absorption of poisonous products of protein autolysis. It must include measures calculated to both prevent and allay dehydration. It must include measures to prevent or minimize or control infection. After all these must come protective and reparative measures chosen to avoid crippling and to limit disability. Many measures find a place in the changing conditions which follow upon the infliction of an extensive burn. Tannic acid is primarily the initial treatment and if carried out efficiently, it greatly simplifies the subsequent treatment. The greatest benefit to be derived from tannic acid can come only when fixation of poisonous products is accomplished as quickly as possible. We have been of the opinion that this process of fixation is hastened when the burned areas are exposed to circulating warm air so as to favor evaporation of fluids and desiccation of the gangrenous tissue. Electric lamps and heaters and fans are useful accessories. Frequent applications of tannic acid solution must be continued until all burned areas are hardened and dry. It now seems that a tannic acid jelly preparation has many advantages over the old methods of daubing or spraying the aqueous tannic acid, followed by open air and evaporation. Dr. Jerry Kemp, of the Eli Lilly staff at the Indianapolis City Hospital, has been using such a preparation for the past eighteen months. The ease of application will commend it to the profession and the simplification of dressings and the lessening of discomfort is of marked benefit to the patient. Extensive cutaneous burns can be made ambulatory within a few hours after the burn is relieved by this method. Apparently fixation occurs just as promptly and quite as effectively, which after all is of greatest importance in a severe burn.

Conclusions. Tannic acid is indicated immediately after the occurrence of the burn for the following reasons: It fixes burned tissue by converting to dry gangrene and tends to prevent absorption of poisonous products. It also tends to prevent infection and acts as a splint and protective to the burned areas, which lessens the amount of skin grafting to be done and leads to cleaner and better granulations and hence more prompt skin grafting when necessary. It adds to the patient's comfort and shortens convalescence. All these advantages in addition to a distinct improvement in the death rate should make it the most favored treatment for burns.

It seems probable that it will be improved upon. If it becomes possible to fix burned tissue more quickly, say in one to two hours instead of from twelve to forty-eight hours as is required by tannic acid, the dose of toxins absorbed will be greatly lessened and recovery more certain and more prompt.

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JUGULAR BULB THROMBOSIS*

(WITH CASE REPORT)

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There has probably been as much written about lateral sinus thrombosis as about any complication of middle ear and mastoid disease, but with all the work that has been done and the amount that has been written we are still losing many of these patients. Some of these deaths are due to not recognizing the condition and some to procrastination until a more fatal complication develops.

Early diagnosis is essential. Sometimes sinus involvement is not present at the time of mastoid operation and develops later. Of 154 cases of lateral sinus thrombosis operated upon at Alexander's[1] clinic in Vienna 13.9 percent were diagnosed after mastoidectomy. Of these, twelve were in acute otitis and ten were complications of chronic otitis. In those cases diagnosed after a primary mastoidectomy there was a mortality of fifty percent, while in the cases where the sinus was operated at the time of the primary operation the mortality was only twenty-five percent.

Jugular bulb thrombosis is a comparatively rare complication of middle ear infection. Most cases reported have been a primary thrombosis without mastoid involvement. To realize the possibility of this it must be remembered the location of the jugular bulb in relation to the inner wall of the hypotympanum.

The cause of the infection may be a direct extension through a dehiscence of bone in the medial wall of the tympanic cavity. Another method of infection is by a retrograde thrombophlebitis of the internal auditory veins.

We must bear this in mind since injury of the inner wall of the tympanic cavity during myringotomy may be a factor.

I would like now to present a case history because of some factors in diagnosis and also because of the conservatism in treatment of this case. Voss, Grunert, Taundler and others have advocated radical attack of the jugular bulb in these cases which is a formidable operation. It takes a great deal of time on a patient who usually is not in the best of condition and it also involves the danger of injury to the facial nerve.

The case I wish to present is of H. G., age seven years.

*Read before the Indianapolis Medical Society, March 17, 1931.

The past history was irrelevant except that four years ago he had an earache on the right side but no discharge.

About December 20, 1930, he had a severe head cold.

December 22, 1930, he complained of pain in the right ear. The following day a myringotomy was done. From then until admission to the hospital he continued to have temperature between 99 and 103.

December 30, 1930, he was admitted to St. Vincent's hospital. There was practically no mastoid tenderness at that time, but there was considerable discharge from the middle ear.

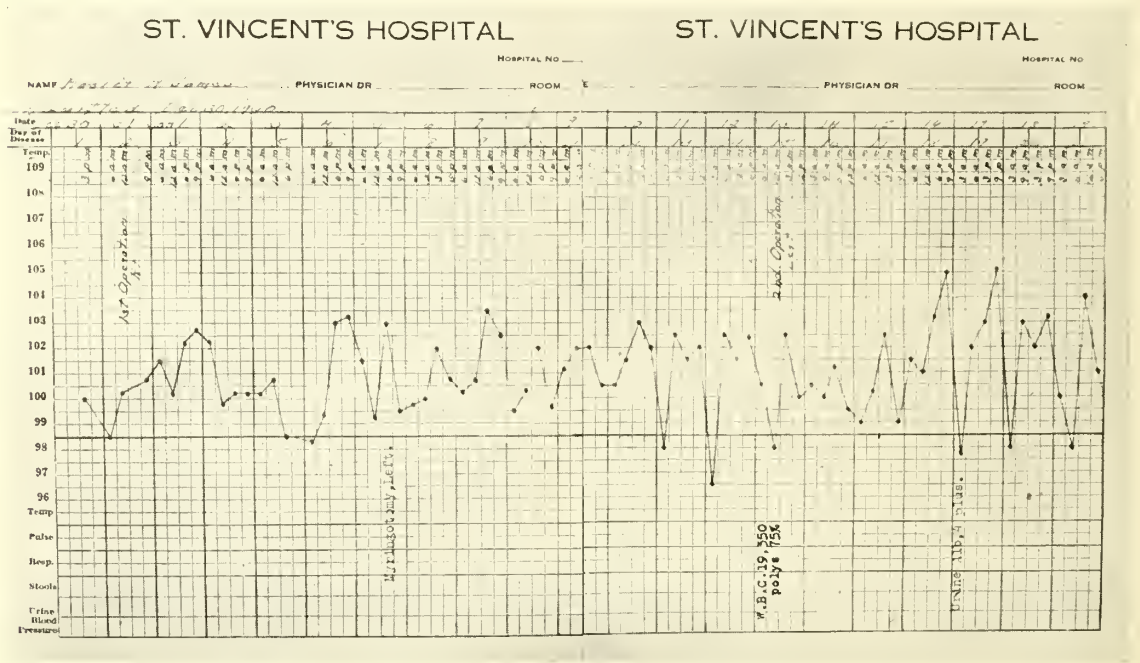
December 31, 1930, Roentgen ray showed complete breaking down of the mastoid cells on the right side. A simple right mastoidectomy was done. The mastoid was filled with pus, but the sinus plate appeared normal so neither sinus nor dura were exposed. Following operation his general condition improved and the temperature returned to normal.

January 5, 1931, five days following operation he complained of pain in the left ear. The temperature was 103. A myringotomy was done, but the temperature continued to fluctuate from 101 to 103.

January 13, 1931, Roentgen-ray showed complete destruction of the left mastoid. A simple mastoidectomy was done. On this date he had a chill with sweating and high temperature. The white blood count was 19,300 with seventy-five percent polymorphonuclears and five percent small lymphocytes. No red count was done. His general condition was not so good following this operation. He continued to have a fluctuating temperature from normal to 105.

January 17, 1931, four days after the second operation the urine contained a four-plus albumin, but previous specimens were negative and repeated following specimens were negative so this was discounted.

January 22, 1931, twenty days after the first operation and nine days after the second operation, I first saw this patient. He had the greenish complexion seen so often in patients with a blood stream infection. The neck was not rigid and the Kernig was negative. The eye grounds showed the veins to be slightly fuller on the right than on the left side. There was no papilledema. The white blood count was 14,300 with eighty-seven percent polymorphonuclears. The red blood count was 2,290,000 with fifty-five percent hemoglobin.



No. 1. Temperature chart showing acute rises and falls, noting especially the subnormal temperature on several occasions.

From the previous history it was almost certain that an active blood stream infection was present. With the temperature fluctuating from below normal to 105 for three weeks and chills with sweating on several occasions, a lateral sinus thrombosis was the logical diagnosis. With both mastoids infected it was a question which side was involved.

A Tobey-Ayer test was done with the following results:

A spinal puncture was done which showed the fluid to have two millimeters of pressure. It was clear and contained six cells as shown by later count.

With the manometer attached pressure was then made over the right jugular vein which did not cause the spinal fluid pressure to rise, except when

sufficient pressure was made to cause the child to cry.

When pressure was made over the left jugular the spinal fluid pressure rose ten millimeters of mercury. This was demonstrated several times.

A diagnosis of a right lateral sinus thrombosis was made and operation advised.

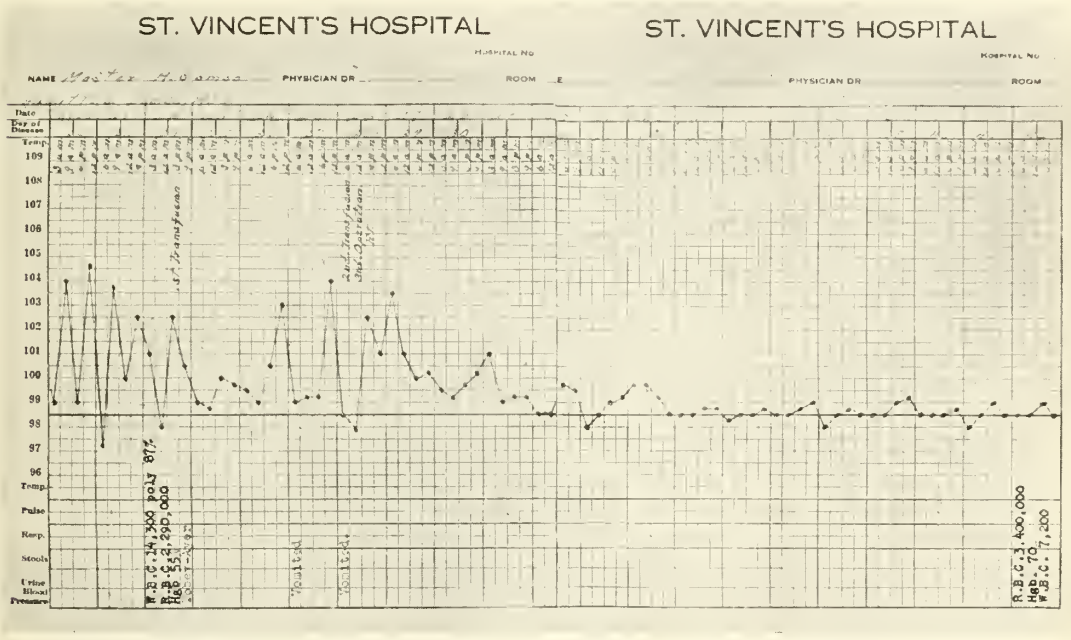
A blood transfusion of 300 cubic centimeters of whole blood was given which greatly improved the patient's condition. A blood culture was not obtained.

The following day his temperature did not go above 101, which was the lowest in nineteen days, so operation was delayed.

January 24, 1931, two days after the blood transfusion, he complained of chilliness and had temperature of 103.

January 25, 1931, his temperature went to 104. He vomited for the first time.

the right side was opened. An additional Whiting incision was made posteriorly. The dura over the middle fossa was exposed but appeared normal. The lateral sinus was exposed from about one inch back of the knee of the sinus to as near the jugular bulb as possible without injuring the facial nerve. The wall of the sinus had a whitish appearance but looked as if it were patent. An incision was made in the sinus as near the jugular bulb as possible. There was free bleeding but this immediately stopped when pressure was placed above, which demonstrated there was blockage below. Another incision was made at the knee of the sinus. The wall of the sinus at this point was distinctly thicker than normal, probably due to a mural clot, but free bleeding was obtained. Light cotton packs were placed over the sinus and the wound left wide open.



No. 2. Continuation of temperature chart. Especially note temporary remission of temperature rise following blood transfusion and permanent drop in temperature following opening of lateral sinus and ligation of internal jugular vein.

January 26, 1931, twenty-six days after the first operation, thirteen days after the second operation and four days after the blood transfusion, I saw him again. His general appearance was of a very sick child. He was listless and took no interest in what was occurring about him. He again vomited on this date. Neurological signs were negative. The temperature was 103.

A blood transfusion of 300 cubic centimeters of whole blood was given. A blood culture taken at this time showed a hemolytic streptococcus. A small spinal puncture was done which showed a clear fluid not under pressure. It contained six cells and no growth on culture.

Immediately following the transfusion under light ether anesthesia the old mastoid wound on

The internal jugular was then ligated and severed below the facial vein. The facial vein was also ligated and severed. The condition of the patient was not good, so no attempt was made to go toward the jugular bulb.

Following operation his temperature did not again go above 101. His general condition rapidly improved. The sinus packs were removed four days after operation.

The patient was discharged as cured on February 11, 1931, or sixteen days after the last operation. At this time his hemoglobin was 70 percent, with a red blood count of 3,400,000 and a white blood count of 7,200.

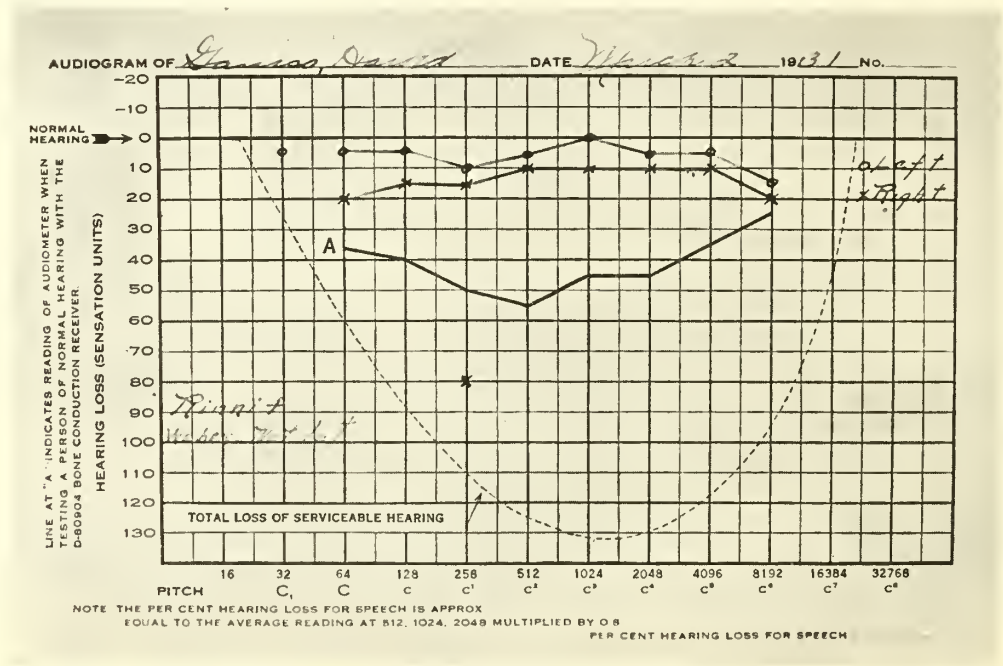
I would like to emphasize a few points in the care of these cases.

History: Too much time or patience cannot be taken, because of the fact that symptoms of slight moment to the family may be of prime importance to the physician.

A chill or chilliness must cause one to suspect a blood stream infection. The patient may only ask for more cover. Repeated chills with a high fever and complete remissions are diagnostic.

Vomiting is of importance, especially in adults. Patients other than very young children do not vomit with only mastoid disease. It usually means intracranial involvement even though it be mere irritation, but it is certainly a danger signal. Vomiting is not seen in a purely blood stream infection. Our reason for exposing the dura over the middle fossa in the above case was because he had vomited the day before and the day of operation.

Diagnosis: Where only one ear is involved, with a typical history and findings that are found in such a case the diagnosis is fairly simple. But



No. 3. Audiogram six weeks following sinus operation.

where there is bilateral involvement we must decide which side to operate upon, since the patient's condition will not usually permit a double operation.

In the above case it was necessary to make a diagnosis following a bilateral mastoidectomy.

The blood count in these cases usually shows an increased white cell count with a very high percentage of polymorphonuclear cells. The red blood count shows a gradual decrease both in the number of cells and hemoglobin content. A valuable aid especially in regard to prognosis in these cases as in other acute infections is the Von Schilling[2] method of counting the young polymorphonuclear cells. A shift to the left indicates a poor prognosis. This may be seen, even though the total white count is low. A shift to the left means an increase in the immature forms as distinguished from the mature forms. These consist of the myeloblasts, myelocytes, and metamyelocytes. Where a shift to the left has occurred and later changes to a shift to the right it shows an increasingly good prognosis.

Blood culture is very valuable as an aid to diagnosis and prognosis. We must bear in mind, however, that very often we can find a positive blood culture immediately following a simple mastoidectomy, especially in babies if the operation is performed when the mastoid is in the hemorrhagic stage. In the above case the blood culture was positive thirteen days after the second operation.

In 1907 Leutert of Geissen noted that a culture taken from the internal jugular at operation may contain organisms, while that taken from the arm vein at the same time might be sterile.

Ottenberg[3] in 1926, thinking this might be of some value in diagnosis, suggested the withdrawal of blood from both internal jugulars. These were plated on glucose agar to which was added ascitic fluid. The difference in the number of colonies were noted on the two sides. He tried this on seventeen patients and showed it to be of definite diagnostic value.

The Tobey-Ayer test is probably the best help in diagnosis. It is essential that the patient cooperate. Of course with a mural clot the resulting test is apt to be negative. In patients with a very low normal spinal fluid pressure the rise is not apt to be marked even though a thrombus is present. We must also remember the possibility of

one sigmoid sinus being absent. I have seen two cases at autopsy during the past two years where this was the case.

Pre-operative Care and Operation: A blood transfusion just before operation often enables these patients to withstand the operation. Kopetzky[4] thinks blood transfusion does more good following removal of the focus of infection. Also that it has no effect on the septic condition of the patient before operation. And that repeated transfusions tend to dilute the antibody content of the patient's blood and are a hindrance to speedy recovery. I cannot agree with this. Occasionally blood transfusions alone will increase the patient's resistance until he is able to take care of an infection from the sinus until recovery occurs without operation.

Eagleton attempted to use immunized donors in these cases. The theory was excellent, but due to the severe reactions some of the donors received from the attempted immunization the practice was discontinued.

Asepsis must be observed so far as possible. To this end it is advisable to shave the entire head. It is always possible in these cases that the sinus will have to be exposed to the torcular. Post-operative dressings are also rendered much easier.

Speed with safety is another factor I would like to emphasize. The surgeon should see that all tables are properly set up before the anesthetic is started.

The neck for jugular ligation and the head should be prepared at the same time and draped so that time will not be lost in changing from one field of operation to another.

For the past two years I have used the Albee drill for these cases and I cannot recommend it too highly because of the increase in speed and the safety of the instrument.[4] I also think the mallet and gouge in these cases have considerable to do with postoperative shock. In the above case we were fifty-five minutes from the time of starting until the neck wound was closed and the anesthetic stopped.

The urgency of speed in the above case was also responsible for not curetting the jugular bulb. There is a possibility this would have been disastrous. It is possible to suspect that since there was blockage in the jugular bulb the inferior petrosal sinus which empties here also contained a clot which was sterile. Manipulation could easily promote active infection if this were true.

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THE STATUS OF BIOPHYSICS IN MODERN MEDICAL PRACTICE*

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"Unsolved problems which confront the medical profession were never so varied or so vital as they are today. A most profound impression has been made upon the public mind by the discovery of new and remarkable methods of cure. A restless spirit is everywhere being developed, and destructive criticism follows hard upon reckless assertion. A larger number of readers than ever before await the utterances of the medical press." These words, written by the editor of the *J. A. M. A.* forty years ago, are still true[1].

In these last four decades of medical progress, exceeding that of any previous century, the discoveries in applied biophysics constitutes an epoch[2]. The evolution of medical biophysics, both in its diagnostic and therapeutic phases, is closely related to the development of the general physical sciences. Modern man has now at his finger tips the control over flexible forces which far surpass the fabled genii of Aladdin[3].

Physicist and physician are interdependent. Both are vitally interested in energy transformations within matter. Mechanistic, rather than vitalistic factors, are being emphasized in physiology, biology and medicine. Everything that lives has a well defined electrical system[4]. Vital phenomena are essentially dynamic, and are best evaluated in terms of physico-chemical energetics. Bioelectric phenomena control physiological ionization, electrolyte formation, absorption of drugs, and the action of hormones, enzymes and catalytic agents[5]. Polarization of bacteria, which is associated with their virulence—as manifested by the cultural "smooth versus rough" stages, and other variations of electro-static potential—are important in the formation of antibodies and bacteriophage.

According to the father of physiology, Claude Bernard[5], the three basal sciences—physics, chemistry and biology—are inextricably interrelated. "There is only one general physics, one chemistry and one mechanics" by which all living as well as inanimate phenomena occur. "All the manifestations of life are borrowed from the outer cosmic world. It is not by *struggling against cosmic conditions* that the living organism develops and maintains its place; on the contrary, it is by an *adaptation to*, an *agreement with*, these conditions." This concept, according to Bayliss, is far more inspiring than that of those who regard living beings as in perpetual conflict with external nature.

Disease may be defined as physico-chemical maladjustment[6]. Although frequently infectious in origin, it is often due to metabolic, allergic or traumatic conditions. Whatever be the cause, physical agencies are almost always beneficial

*Read before the Indianapolis Medical Society, March 31, 1931

when correctly used under medical supervision. Physical agencies include the scientific utilization of heat, light and devices for electrogymnastics, massage and therapeutic exercise, as well as the other three natural necessities of life, suitable pabulum, water and air. Accurate diagnosis is essential in order that suitable selection of cases may be made. More or less definite indications and contraindications exist. In most cases physical agencies are best utilized as a valuable adjunct to orthodox medical and surgical methods of treatment. In many instances, however, the symptomatic relief and functional restoration which follows expert physical therapeutics is so remarkable that we are almost justified in claiming a direct specific curative effect. Pseudomedical practitioners have been prompt exploiters of this field of work—and are claiming extraordinary results. As physicians, we cannot afford to overlook any method which is of value in the prevention, alleviation or cure of disease. It ought not to be said of us, that we of the regular medical profession have chosen to completely ignore the wise injunction of Dante — "Work as nature works, in fire."

Man and other animals are energy transformers[7]. Both kinetic and potential energy are constantly being received from the external environment. Solar radiations are vitally essential for all higher forms of life. They are received directly through the ectoplasm, and also indirectly as pabulum, photosynthetic compounds and vitamins via the endodermic food tube. Energy transformations occur within the mesoblast, chiefly in the skeletal muscles. This conversion of potential energy[8] into the kinetic energy of motion, or glandular activity is associated with the liberation of heat. More than eighty percent of the total metabolic processes occur within the involuntary tissues, or within somatic musculature acting reflexly without conscious control.

Physicians are becoming more interested in the involuntary, vegetative or autonomic neurochemical control mechanism of these involuntary processes. This control is partly nervous, partly chemical, but in every instance physiochemical in nature. The autonomic nervous system consists of two main subdivisions[9]. The first consists of involuntary motor nerves connected with the dorsolumbar medulla spinalis. It is the original sympathetic nervous system—whose ganglia lie lateral, or collateral to the spinal cord. It is stimulative to the circulatory system, being cardioaccelerative and vasoconstrictive. On the other hand, the smooth muscle and glands of the digestive tract are inhibited by the sympathetic nervous system. The other main subdivision of the autonomic nervous system is known as the parasympathetic nervous system. Its fibers consist of long preganglionic efferent axones, which run chiefly in the vagus nerve and the nervus erigentes. They are vasodilative, and cardioinhibitor, but are tonic stimulators of the smooth muscle and glandular epithelium of the food tube.

The following agents act synergistically with the sympathetic system: adrenalin, calcium and actinic radiation. All these agents are vasoconstrictive. They are opposed chemically by the following parasympathetic synergists:—acetylcholin[10], potassium, and the various thermal agencies; all of which are vasodilatives. Adrenalin and acetylcholin are physiological antagonists—the former is derived from a modified sympathetic nerve ganglion, the adrenal medulla —the latter is known as the vagal hormone. Acetylcholin is formed throughout the body where mechanic friction and heat have developed. It is a powerful vasodilative agency when exhibited clinically in minute dosage. Calcium and potassium are physiological antagonists—the former is essential for sympathetic activity, the latter for parasympathetic function.

A balanced state of hormone equilibrium exists normally. The ectodermic derivatives, adrenal, thyroid and postpituitary, are opposed to the endodermic pancreas, liver, parathyroid and anterior pituitary. The ectodermic group are chiefly catabolic and vasoconstrictive—the endodermic endocrines are chiefly anabolic and vasodilative. Further discussion of this interesting field of physiology and clinical medicine is impossible here for lack of time.

We may now consider briefly the physical chemistry of the action of physical agents—with special reference to the control of intracellular metabolic processes. Protoplasm, the physical basis of life, is composed principally of water and colloids. A colloid is an insoluble substance rendered soluble by extreme subdivision[11]. This finely divided state, only slightly larger in size of its particles than molecules, and also the wide dispersion of these particles in fluid-electrolytes, permits of the development of a relatively enormous surface energy. Frictional, dialectric, and other factors producing variations of electrostatic potential upon the innumerable interfaces are important factors in the reversible sol and gel stage phenomena of living colloids.

Another reversible phenomenon of great importance is the variability in permeability of the semipermeable membranes, constituting the plasmodial nuclear intracellular and capillary endothelial lining membranes. The chief factor modifying permeability appears to be the reversible solubility of their constituent colloids in water versus fat. Monovalent kations such as potassium markedly increase permeability by increasing the aqueous phase. On the other hand polyvalent kations such as calcium, decrease permeability, by increasing the lipoid phase[12]. It is well known that vasodilatives increase permeability — and vasoconstrictives decrease permeability. Thermal agencies are vasodilative and increase permeability resulting in exudation, vesiculation and pruritus. They are of value wherever hyperemia,

diapedesis, exudation are indicated — as in ischemic states—chronic arthritis, Raynaud's disease, volkmans ischemic contractures.

Actinic agencies such as ultraviolet radiation, together with the other synergists of the sympathetic nervous system are indicated in allergic phenomena. Quartz mercury vapor light, calcium and adrenalin promptly and effectively relieve the symptoms and restore the disturbed neurochemical balance in such cases as eczema, urticaria, pruritus, angioneurotic edema, erythromelalgia, hyperesthetic rhinitis and bronchial asthma. On the other hand these vasoconstrictive agencies are contraindicated in arteriosclerosis, angina pectoris in which vasoconstrictive phenomena are predominant—but in these conditions diathermy or autocondensation is of value — along with other vasodilative agencies. The vasoconstrictive sympathetic synergists are also contraindicated in catabolic states such as toxic goiter, diabetes mellitus, pellagra and Addison's disease—also in any case with a history of sunstroke. In all of these cases ultraviolet radiation has resulted in dangerous if not fatal reactions. Heavy doses of quartz light are contraindicated in pulmonary tuberculosis with secondary infection—but are of great value in extrapulmonary tuberculosis of bone, gland and peritoneum. Ultraviolet radiation is of value in mineral deficiency diseases, such as rickets, tetany, osteomalacia. It is markedly beneficial in certain types of anemia and many of the skin diseases—both of the allergic and of the infected group. It is almost valueless in neoplasm due to the poor penetrative property of the shorter rays. On the other hand, these same rays are highly destructive to bacterial protoplasm—due to the affinity of the tyrosine and phenylalanine — chief aminoacids which compose bacteria—for ultraviolet radiation.

There are many other examples which might be given of the physical chemical effects of actinic versus thermal agencies[13]. We might mention the marked efficacy of the latter in the relaxation of muscle spasm—whether this be voluntary or involuntary muscle, of the vascular system. Diathermy is markedly valuable in traumatic lesions, lobar pneumonia and paresis. The increased diapedesis of endothelial macrophages produced after vasodilation and increased permeability of the capillaries, is the probable explanation of the excellent results in pyretotherapy of paresis.

The factors which we have outlined are not sufficient to explain all the effects of physical agencies in the treatment of disease[14]. We must remember that there is a great deal yet to be discovered about the action of all these agencies, and that the antagonistic phenomena which we have outlined are frequently complicated by various combinations of infection, allergic or other metabolic phenomena as yet unknown. Any agency which is capable of producing powerful beneficial effects is also able to do harm. Much harm has been and is being done by improper or inadequate use of these various physical agents. They are being employed not only by physicians, but also by laymen, in barber shops, beauty parlors and in the home. Self-medication is always dangerous—and a little knowledge is a dangerous thing. Nevertheless, current periodicals—not excepting our own national medical journal and its subsidiary—*Hygeia*—devote much advertising space to "lamps for home treatments," irradiated foods, "bottled sunshine," etc. We should give credit, however, to the Council on Physical Therapy and to the United States Bureau of Standards for excellent educational propaganda among the physicians—establishing basic fundamentals of biophysics and therapy.

A much discussed subject among doctors and patients is the status of electrosurgery[15], or surgical diathermy—with special reference to the diseased tonsil. One syndicated medical writer is manifestly over-enthusiastic—another hypercritical—and still another endorses the method in conservative terms. The viewpoint of the latter, Clendening, is the more rational. The method is of limited value, being chiefly indicated in cases of recurrent infected tonsillar tabs, occurring in adults who have the time to spend in the numerous (8-10) seances that may be necessary. A cooperative patient is absolutely essential—and absolute freedom from operative and postoperative discomfort is not always obtained. Nevertheless, the comparative freedom from such complications as hemorrhage, and postoperative lung complications have attracted the attention of a number of excellent otolaryngologists who highly recommend the method. The present status of electrosurgery in other fields of medical practice is more than satisfactory. It is rapidly gaining popularity in dermatological, neurosurgical, general surgery, and genitourinary practice. Properly performed electrosurgery possesses all the advantages of cautery excision—with the added advantage of greater flexibility and ease of control. By the proper combination of "cooking and cutting currents," difficult operations are made easy, and almost impossible operations made possible. Electrosurgery is a superior ablative technic for all types of accessible neoplasms and granulomata. The results, in early cases of low grade malignancy, are excellent. In the late, recurrent, radium and x-ray resistant cases the mortality is high—being around seventy percent within the first three years. However, in almost every case, palliative relief from sepsis and pain may be secured—and in a few cases the results have been better than was expected—the patients remaining alive and well (?) for a period in excess of five years. In all of the advanced cases—in which neighboring lymph nodes are involved — a combination of cautery or electrosurgical excision with pre and postoperative roentgen radiation appears to be the best treatment to date. Electrosurgery has now

become established in modern medical practice—but like every other highly technical procedure, it exemplifies the rule that "there is no substitute for skill and experience."

Electrogymnastic treatment, electrical reactions for degeneration, and appropriate orthopedic support are essential in the proper treatment of poliomyelitis and peripheral nerve palsy. The treatment should be begun as soon as the diagnosis has been made—if expert medical supervision is available. The prevention of crippling adhesions, contractures, atrophic fibrotic and ischemic paralytic states in post-traumatic lesions—largely depends upon the early intelligent use of physical therapeutics—diathermy—sinusoidal current, morton static wave, manual massage and occupational therapy. No longer does the obsolescent dictum prevail—that "electricity is always dangerous in acute conditions."

SUMMARY OF CONCLUSIONS

1. Widespread interest exists among both physicians and their patients in the practical application of biophysical agencies administering light and heat and electrogymnastic exercise.

2. A dearth of knowledge exists which can be corrected only by the study of the fundamental principles of medical biophysics—which should be taught in the premedical schools along with academic mathematical physics.

3. The biophysical agencies, light and heat, are physiological antagonists. They are properly balanced in the solar spectrum—but when administered alone their biophysical action, whether actinic, vasoconstrictive and catabolic—or whether thermal, vasodilative and anabolic—should be remembered.

4. Physical agencies, together with their respective chemical synergists, exert a profound influence upon cellular metabolism, by modifying the permeability of the semipermeable membranes. Actinic agencies decrease permeability—thermal agencies increase permeability.

5. A state of dynamic equilibrium is the normal functional state of every living tissue—including skeletal muscle. "Log-like" rest is unphysiological. In post-traumatic states, peripheral nerve palsy, muscle distrophy and anterior poliomyelitis, electrogymnastic exercises maintaining muscle tone and nutrition should be initiated under expert medical supervision at the earliest possible moment.

6. Tissues which have undergone irreversible changes to neoplasm or infection, may most efficiently be ablated by destructive heat—best exhibited in the form of electrosurgery—or surgical diathermy.

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ACUTE MONONUCLEOSIS*

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Acute mononucleosis is an acute febrile disease, infectious and contagious, characterized by swelling of the lymph nodes, chiefly of the post-cervical region, usually by enlargement of the liver and spleen, and by a mononuclear leucocytosis.

In 1889 E. Pfeiffer described a disease of children, which he called "glandular fever," which occurred in house epidemics. In 1896 West reported an epidemic of a similar disease in eastern Ohio. The clinical features of this disease were identical with what we now call acute mononucleosis, or acute infectious mononucleosis. At that time the modern technique of blood staining had not been developed and we have no record of the blood picture in these cases. Then for about twenty years but little attention was paid to this disease and but few references to it are to be found in the literature. In 1920 Sprunt and Evans[1] reported six cases and on account of the characteristic blood picture gave it the name of infectious mononucleosis. In 1922 Longcope[2] reported ten cases and since then there has been considerable literature on the subject, sometimes under the name of infectious mononucleosis, sometimes under the name of glandular fever. It is interesting how a disease like this can be described, forgotten for more than twenty years, and then rediscovered under a different name[3].

The disease occurs in two forms, sporadic and epidemic. The blood changes seem more pronounced in the sporadic than in the epidemic form. It occurs chiefly in children under twelve, but also occurs quite frequently in young adults. The oldest patient reported with the disease was fifty-six. There has been no causative organism regularly isolated. In 1929 Gorham, Smith and Hunt[4] inoculated guinea pigs with the membrane from the pharynx of a young girl with Vincent's angina. The animals developed the typical picture of acute mononucleosis and several individuals that came in contact with the patient or with the infected guinea pigs developed acute mononucleosis. The tonsils and lymphoid tissue of the upper respira-

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tory tract seem to be the portals of entrance of the infection.

The incubation period has been given at from five to ten days, but little is definitely known about it.

There may be a prodromal period of two or three days with a little sore throat, malaise and listlessness. In some cases the mononuclear increase has been noted before the fever or other acute symptoms began. The onset is usually abrupt, with chilly sensations, headache, sore throat, malaise, prostration, and a fever of 100 to 103, rarely more. The fever usually lasts two to seven days, but sometimes much longer. The fall in temperature is usually gradual.

The cervical lymph nodes are enlarged, especially those of the post-cervical chain. They vary from one-half to two centimeters in diameter and are firm, discrete, of a rubbery consistency, and slightly tender. Sections of the lymph glands show a lymphoid hyperplasia, and nothing else. The inguinal axillary and epitrochlear lymph nodes are often slightly enlarged.

Inspection of the throat reveals the tonsils to be somewhat swollen and a dry granular condition of the mucous membrane is present. If there are signs of acute tonsillitis or a membrane is present, this is regarded as a complication rather than an integral part of the disease. The nose is often partly occluded from the swelling of the mucosa, and there may be some discharge. The eyes appear congested, and a small percentage of the cases present a dry, somewhat granular conjunctivitis. This condition may precede the fever. During the acute stage the skin is flushed. During convalescence there is a peculiar pallor and the child appears anemic, but a blood count shows that this is not the case[5].

The spleen is palpable in many but not all cases and the liver not so often. The spleen when enlarged is usually felt not more than a finger breadth below the costal margin and may be somewhat tender. There may be a rather diffuse abdominal tenderness.

The red blood count and hemoglobin are normal or only slightly decreased. The white count is usually, but not always, increased and varies up to 25,000 or more per cubic millimeter. The striking feature of the disease is the increase in the mononuclear cells of the blood. At the height of the disease, the polynuclear elements are both relatively and absolutely decreased. The mononuclear increase varies from slightly above normal to 99 percent of the white cells present. The mononuclear cells are mostly lymphocytes with only a slight increase in the large mononuclear cells. There are many mononuclear cells present that are difficult to classify. These are somewhat larger than small lymphocyte, non-granular, with oval, kidney-shaped or lobulated deep staining nuclei, often eccentrically placed[2].

The course of the disease is from two to three weeks, sometimes longer. It is a disease of a short, acute stage and a prolonged convalescence. It is very prone to recur in a few days' time. It has been noted that the symptoms are much milder in recurrence than with the original attack and although the fever may rise as high as before and the glands again enlarge, the patient is more comfortable and does not seem so ill[6]. The fever usually lasts only one or two days during a recurrence.

The blood picture returns to normal very slowly and it may be several months before the elements of blood regain their normal proportions.

At the onset acute mononucleosis may be confused with tonsillitis, influenza, typhoid or malaria. At the height of the disease, tuberculosis lymphadenitis, Hodgkins' disease and leukemia may be considered. All except the latter are ruled out by blood examination. Against leukemia are the mildness of the symptoms, the absence of severe anemia and the tendency of the patient to improve rather than the progressive downward course seen in leukemia. Sometimes leukemia cannot be ruled out until the progress of the case is observed for some time.

The prognosis is invariably good. All cases reported in the literature have recovered except five cases that had a secondary streptococcic invasion of the lymph glands.

The treatment is entirely symptomatic, with rest in bed during the acute stage and tonics and rest during the prolonged convalescence.

Case Report. The patient is a white boy, age two and one-half years, who took sick on April 18th with swelling of the posterior cervical glands and slight malaise. On the next day the throat appeared congested and there was a rectal temperature of 100 in the afternoon. On April 20th there were follicular patches on the tonsils and the temperature varied from 100 to 102.4. On April 21st the tonsillar exudate had spread and the child appeared quite ill and uncomfortable. There was considerable nasal discharge, necessitating mouth breathing. The cervical lymph glands were considerably enlarged, firm, discrete and not tender. The axillary and inguinal glands were palpable. The spleen was palpable just under the costal margin. Direct smear from the tonsils showed very many Vincent's spirrillæ and fusiform bacilli. The white blood count was 18,600 with 56 percent lymphocytes, 3 percent large mononuclears and 41 percent neutrophiles.

The general condition was unchanged until after April 26th. The tonsillar membrane was thick, adherent and covered the entire surface of both tonsils. Three cultures for diphtheria taken on successive days were negative. The temperature fluctuated from 101 to 103. The mononuclear increase became more pronounced. On April 27th there was no fever, the spleen was not palpable, the throat was clear and the cervical glands were smaller, but the white count was 17,500 with 71 percent lymphocytes and 2 percent large mononuclears. There was no more fever

until May 1st, when the temperature rose to 103. There were afternoon elevations of temperature for a week, although the child did not appear very ill, and nothing was apparent to physical examination but the slightly swollen glands.

Since that time the patient has been afebrile. He was very weak at first and lost several pounds' weight, but has slowly recovered. Tuberculin tests were negative for both human and bovine bacilli. On May 18th the white count was 9,300 with 62 percent lymphocytes, 2 percent large mononuclears and 36 percent neutrophiles.

BLOOD COUNTS

	RBC	Hbgl.	WBC	Neut.	Lym.	L.M.	Eos.	Baso.
April 21	4,000,000	70	18,600	41	56	3		
April 23	4,600,000	80	19,000	45	48½	6½		
April 25			22,600	34½	59	5	1	½
April 27			17,500	27	71	2		
April 29	4,900,000	80	19,400	37	54	7	2	
May 1			16,400	54	44	2		
May 5			15,200	36	58	6		
May 11			9,700	21	72	6	1	
May 18			9,300	36	62	2		

Some authorities have doubted that infectious mononucleosis exists as a disease entity. They claim that some individuals, especially children, react to infections with a mononuclear increase, rather than with the usual polymorphonuclear increase. However, some patients that have had this disease have been shown to have a polymorphonuclear increase to subsequent infections. The rather constant course of the disease, its occurrence in epidemics, the clinical features and the experimental work referred to above in transmitting the disease to guinea pigs and then to humans[4] all seem to indicate that it is a disease entity rather than a special type of tissue reaction to a non-specific infection.

Infectious mononucleosis, or glandular fever, is undoubtedly a much more common disease than is generally realized. Its importance to us as practitioners lies in the diagnosis and prognosis. Though rarely severe, its course is often prolonged and at times we may be saved considerable worry and embarrassment if we recognize the condition promptly.

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THE FIRST FORMAL EFFORT TO OBTAIN A GENERAL HOSPITAL FOR INDIANA

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A friend of the writer who had been looking for material in preparing an historical address called attention to a discovery he had made in the Transactions of the Indiana State Medical Association for 1868. As far as the writer knows, but two copies of that year's published Transactions are in existence. The excerpt from this record is a matter of general and historical interest and naturally it is a matter of special interest to the writer, who remembers as a boy his father's repeated emphasis of the need of a general state hospital at Indianapolis. The writer distinctly recalls the disappointment of his father on his return from the 1868 meeting at the lack of interest and understanding displayed in the medical "convention" as it was then called. Living at Southport, quite near Indianapolis, it was possible to obtain the aid of a surgical consultant even in cases where patients were unable to pay anything, but there were no hospital facilities. In addition to his general practice the writer's father had charge of the work for the township poor and it was this phase of hospital need which was especially emphasized in his plea for a general state hospital.

A brick building, intended as an Indianapolis city hospital, had been erected through the vision and efforts of the late Dr. Livingston Dunlap before the civil war but had not been used. The government took charge of it during the war and added some frame cantonments which were utilized in connection with the old building. In July, 1865, at the close of the civil war, the Indiana Soldiers' Home was created and the Indianapolis City Hospital building was utilized from July, 1865, until April, 1866, with the late Dr. Milton M. Wishard as superintendent, which position he held after its removal to Knightstown and until his death in 1877. During the civil war the State of Indiana cooperated with the federal government in the management of the hospital and the late John M. Kitchen was the chief medical officer with Dr. Milton M. Wishard as resident. On July 1, 1866, the city occupied the building as a city hospital for the first time with the late Dr. Greene V. Woollen as superintendent. When the hospital was taken over by the city it was supposed to have a capacity of seventy-five beds, but the actual capacity was not more than fifty or sixty beds. Then the office of superintendent was for one year and Doctor Woollen was superintendent until July 1, 1870, by annual reappointment. The City Hospital has been in continuous existence ever since, but the old building and the frame structure added during the war were wholly inadequate and poorly suited for hospital use until the erection of the new City Hospital during the writer's superintendency from 1879 to 1887. The new buildings were commenced in 1883 and were completed in 1884 and 1885 and had a capacity for 125 patients and were regarded as thoroughly modern and up-to-date at that time. The east wing was completed during the spring and summer of 1883 and immediately occupied. On September 1st of that year a training school for nurses was opened, probably the second training school for nurses established west of the Alleghenies and the first in Indiana.

The second wing, built in 1884, and the third in 1885, constituted what was then known as the new City Hospital. While still used by the city they are entirely overshadowed by the splendid new buildings that have been erected in recent years, but they served adequately their purpose for many years and constituted the first modern general hospital erected in Indiana and were greatly appreciated by the medical profession and the public.

As the first efforts to obtain a general medical and surgical hospital for Indiana have not been published since the publication of the Transactions of 1868 and are not generally known, the writer is glad to present the following:

"From the Transactions of the Indiana State Medical Society 1868, Dr. John S. Bobbs, President, Pages 159, 163 to 166, Inclusive.

Meeting Held in Senate Chamber of the Old State House.

May 19, 1868.

Dr. Wishard presented the following resolution:

Whereas, The State of Indiana has no general hospital in which the unfortunate and indigent poor of the State can receive medical and surgical treatment;

Resolved, That the President of this Society appoint a Committee of one from each Congressional District to memorialize the next General Assembly to make an appropriation sufficient to establish and support a hospital for the treatment of such indigent persons.

On motion, the resolution was made the special order for 10 o'clock tomorrow.

May 20, 1868.

The hour of 10 o'clock having arrived, the President announced that the resolution offered yesterday by Dr. Wishard was next in the order of business.

Dr. Wm. H. Wishard:

"My object in bringing this subject before the convention is not only to ameliorate the sufferings of the unfortunate and indigent poor, but to save to the profession many cases of surpassing value. I know of a number of surgical cases which, on account of the want of facilities furnished for treating them at the county poor houses, have failed of cure and been lost to the world and to the profession. There are many physicians who know how totally inadequate are the appliances and comforts afforded at the County Asylums. If the many cases that have fallen under my observation—cases that with proper treatment might have been cured—had been brought to a hospital, the facts elicited would have furnished the most valuable material for our Medical Journal, and the success attending the treatment would have redounded to the glory of the profession. We now have no general hospital for the State. Other states have such institutions, and I think it time we were having one. We need some place for giving attention to cases requiring the most scientific practice in surgery. I have now in mind a surgical case of great importance. The person had no means and was taken to the county asylum. There no appliances are furnished the physician for giving proper attention to the case, the consequence of which will be that a cure cannot be effected. Besides, the cases, under proper treatment, would have furnished valuable data to the profession, and would doubtless have been cured. It is with these views that I introduce the resolution."

Dr. J. F. Hibbard:

"As the matter now stands, I can not vote for the resolution. The gentleman brings forward no plan. We have no means of knowing whether the object sought is practicable. If the resolution contemplated referring the subject to a committee, with instructions to report at the next annual meeting, I might think of supporting it. Before we can go before the Legislature with any assurance of success, we should first have matured a feasible plan to present. I am unwilling to invest a committee with authority to go before the Legislature in a matter of this kind, without knowing something of the plan of the institution proposed."

Dr. W. H. Wishard:

"Why not discuss the matter now and devise a plan at once? The necessities of the case demand it. We want whatever is to be done in the matter done at once."

Dr. Geo. Sutton:

"I don't think there is any use of passing on this question at all. Each township engages its physician who, if he chooses, calls in assistance, and in operations of any importance the very best medical skill to be had is at hand. I think by the present law the counties are doing all that could be asked."

Dr. W. Wands:

Stated his experience to be, that many counties were illy provided for taking care of the unfortunate indigent, and favored the resolution introduced.

Dr. J. F. Hibbard:

"If the gentleman had brought forward some proposition we would have known what to do, but as it is we have no plan and cannot debate the matter intelligently. Where is this hospital to be located? This is only one of a score of important questions."

Dr. V. Kersey:

Stated his position to be, that there ought to be one good hospital centrally located. The subject was one of great importance to the State and to the profession. He favored the adopting of measures that would secure the early presentation of a plan well matured, upon which the Society might with some hope of success approach the Legislature. As the voting down of the proposition might admit of damaging misconstruction he hoped for its success.

Dr. J. Jones favored the passage of the resolution.

Dr. W. Lomax:

"Would it not be a good plan to appoint a committee to devise a plan of action and submit the same to the auxiliary societies?"

Dr. W. H. Wishard:

Disclaimed any preference for one plan or the other. He thought Dr. Bobbs could appoint a committee of one from each Congressional District that would act in the matter in a manner that could not fail to meet with the approval of the Society.

Dr. J. H. Woodburn:

Objected to the whole matter. He thought the good contemplated might be effected by the local societies, each for their respective districts, as in this place, in Richmond, in Evansville and other places. Patients dangerously ill could not be moved at any rate to a general hospital for treatment, if they happened to be any great distance off. It would be unsafe, and therefore he thought the scheme an impracticable one.

Dr. W. F. Hervey:

Thought we should consider what arguments we could bring to bear to influence the Legislature on the granting of such a prayer. He proceeded to state such as he thought were some of the arguments in favor, and what would operate to counteract them. He thought as to surgical cases accumulating at such a hospital it was not at all likely. The individual pride of a physician would be opposed to the yielding of an important case to the hands of others. As to appliances for treating surgical cases, nearly every physician was supplied with the necessary instruments.

Dr. R. E. Haughton:

"I don't know whether there is anything behind this resolution or not. I think a State Hospital would not prove of such utility either to the sufferers or to the profession as some claimed it would. Provision of the character sought in the resolution should be a matter of local pride. If it is sought by this move to assist in the sustaining of a medical journal, or to form a nucleus for a medical school, such facts should be stated, and they would go far towards influencing the Legislature favorably. As the matter stands I think the thing impracticable."

Dr. W. H. Wishard:

"As to whether or not there is anything behind this I will state that there is. There is humanity behind it, and nothing else. I think it is an object which if successful will work great credit to the State. As to providing in the cases I have mentioned in the counties where such occur, I have witnessed so much suffering resulting from the penuriousness of county commissioners that I look for nothing hopeful from such quarters. I brought the matter up here, because I thought the object a good one, and I know of no better place to set the ball rolling than right here. If the Society thinks it right to vote the matter down and take no action at all, let it take the responsibility. I regard a State Hospital as important as a State Lunatic Asylum or Blind Asylum. I think it would be creditable to the State to have such an institution, which would also operate as a nucleus for a medical school."

Dr. V. Kersey moved the following amendment to the resolution:

'And that said committee be instructed to report at the next annual meeting of the Society.'

Carried.

The original resolution, as amended, was taken up and passed unanimously."

Dr. Bobbs, the president of the Society, was made Chairman of the Committee on State Hospital.

The following year (1869) Dr. Bobbs reported that he had written each member of the Committee in the different Congressional Districts and had received replies from about one-half of them. He said those replies indicated a lack of understanding of the purpose of Dr. Wishard's resolution and that several of those who replied were opposed to it. He then presented a resolution favoring the erection of a general state hospital located at Indianapolis and said that in doing so he desired the action of the State Society itself as the Committee members had not responded sufficiently to justify him in making a recommendation on the part of the Committee as a whole. The resolution which he, as chairman, presented strongly favored the erection of such a hospital, and on motion of Dr. Wishard it was unanimously adopted as a memorial to the Legislature.

Dr. Bobbs died May 1, 1870, just before the next annual meeting of the Indiana State Medical Society and nothing came of the undertaking. If he had lived it might have been accomplished. In this connection it is interesting to note that the Indiana Medical College was organized in 1869, and the first class graduated in 1870. Dr. Bobbs was its first professor of surgery and its first dean.

It was forty-six years after the resolution of Dr. Wm. H. Wishard was introduced before the Indiana State Medical Association until the first general state hospital was established. The Robert W. Long Hospital (1914), the James Whitcomb Riley Hospital for Children (1924) and the Wm. H. Coleman Hospital for the Diseases of Women and Obstetrics (1927) constitute the present group of state hospitals under control of the Indiana University School of Medicine.

The following is a summary of all Indiana hospitals made from the list in the 1931 Directory of the A. M. A.:

General Medical and Surgical

		Beds
11	City Hospitals	868
35	County Hospitals	2,010
13	State Hospitals	1,149
3	Federal Hospitals	1,501
46	Individual, Industrial, Association and Partnership Hospitals	2,378

31 Church and Fraternity Hospitals	3,968
139 General Medical and Surgical Hospitals containing	11,874
Mental and Nervous Diseases	
1 County Hospital	250
9 State Hospitals	10,108
6 Individual, Association and Partnership Hospitals	262
1 Church Hospital	26
17 Hospitals for Mental and Nervous Diseases	10,646
Total 156 hospitals in Indiana containing	22,520 beds

MEDICAL AND HOSPITAL SERVICE FOR WORLD WAR VETERANS

(A RESOLUTION CONCERNING A NEW PLAN OF BENEFITS TO VETERANS OF THE WORLD WAR WITH NON-SERVICE CONNECTED DISABILITIES TOGETHER WITH A DISCUSSION OF THE RESOLUTION)

H. H. Shoulders, M.D.
NASHVILLE, TENNESSEE

To Veterans of the World War:

The following resolution was adopted by the House of Delegates of the American Medical Association at Philadelphia in June of this year:

"Whereas, The Federal Government has inaugurated the policy of rendering medical and hospital benefits to veterans of the World War with non-service connected disabilities; and

"Whereas, This policy was inaugurated over the opposition of the American Medical Association; and

"Whereas, The policy now in force, if carried to its logical conclusion, involves the construction, the staffing, and the maintenance of a sufficient number of hospitals to accommodate the hospital needs of all the veterans of the World War; and

"Whereas, Such a policy places the Federal Government in unnecessary and unjust competition with the civilian hospitals and the medical profession of the United States; and

"Whereas, The present policy is of unequal benefit to veterans by reason of the fact that many disabled veterans cannot (for one reason or another) avail themselves of the benefit; therefore be it

"Resolved, That the House of Delegates of the American Medical Association petition the Congress of the United States and the American Legion to abandon the policy of rendering hospital and medical benefits to veterans of the World War with non-service connected disability, and substitute therefor a plan of disability insurance benefits with the following provisions:

"First, the creation of a Bureau of Disability insurance in the Veterans' Bureaus as now constituted.

"Second, the issuance of a disability insurance policy to each veteran with a disability benefit clause, as follows:

"(a) The payment of a weekly cash benefit during a period of total disability, and

"(b) The payment of liberal hospital benefit sufficient to cover the hospital expenses of a veteran during a period of hospitalization for any disability. Such benefits to be paid to a veteran on satisfactory proof of total disability, and

"Third, Such other provisions as are necessary for the proper administration of the act.

"Be it further,

"Resolved, That the proper officers of this Association be instructed to approach the officers of the American Legion with the view to securing the adoption of the policy above set out as a part of the legislative program of the American Legion, and be it further

"Resolved, That each state medical association be requested to form a committee whose duty it will be to approach the state and local Legion posts throughout the country with a view to securing the adoption of this program by them."

As the author of the resolution, as a veteran of the World War and as a member of the American Legion, I am addressing this communication to veterans with a request that you give it consideration.

The Congress of the United States has provided several forms of benefits for veterans of the World War. The one form of benefit to which the resolution relates is that which provides for free hospital, medical and surgical attention for veterans with *non-service connected* disabilities.

It will be borne in mind that a service connected disability is one which was caused, or is presumed to have been caused, by service. A non-service connected disability is one which is not related to service.

This policy of the government, if carried to its logical conclusion, involves the government in the construction and operation of a sufficient number of veterans' hospitals to accommodate the hospital needs, for all purposes, of all the veterans of the World War.

When this policy was first inaugurated it doubtless was the intent of Congress to provide a service for those veterans who were ill, in need of hospitalization and unable to pay for it. No one can criticize such a motive and far be it from me to attempt to do so. One, in my judgment, may criticize a plan of benefits, and especially so if a more satisfactory plan is offered to take its place. That was my purpose in sponsoring the resolution.

Therefore, two specific plans of benefits are under discussion; one is the hospital plan *now in force.* The other is the disability insurance plan proposed in the resolution.

It is intended that the insurance plan should apply to the same veterans as the hospital plan applies to.

The hospital plan of benefits provides for each veteran a bed in a hospital, and surgical and medical attention, *provided his condition requires hospitalization.*

It is readily apparent that this plan of benefit is quite limited. It applies only to the veteran whose illness requires hospitalization and who is in position to accept hospitalization. This reduces the benefit to a limited number of veterans. For example, a majority of illnesses do not require hospitalization. The veteran whose illness is of such a character as not to require hospitalization receives no benefit regardless of his economic distress. His disability is just as complete and his economic need just as great as the veteran whose illness or injury does require hospitalization.

Secondly, the condition of the veteran from acute illness, or injury, may be such that he cannot be transported with safety to a veterans' hospital, or the condition might be such an emergency that it could not wait, in which cases the hospital plan would be of no benefit to the veteran.

Again the illness, or injury, of the veteran might require hospitalization for proper treatment, but the circumstances of the family prevent him from accepting the benefit. The veteran might prefer to be in a hospital in his community where he could remain in touch with his family. Under such circumstances the hospital plan would be of no benefit.

Another circumstance of considerable importance is that the family or dependents of the veteran in economic distress who accepts hospitalization is left to the aid of community charity. The veteran is disabled. His income has ceased. He has accepted hospitalizatlion in a government hospital. His family is in distress, which does not add to his peace of mind.

All the circumstances mentioned above have come under the observation of the writer. Many more might be mentioned, but these suffice to show that the hospital plan is of benefit to a limited group, and not of equal benefit to all veterans, and by no means touches all veterans who are ill and in need.

The insurance plan of benefits proposed in the resolution provides for two forms of benefit:

(a) The payment to the veteran of a sum of money per week during any period of total disability. (A cash benefit.)

(b) The payment of a hospital benefit per week during any period of hospital confinement. (A hospital benefit.)

Each veteran would benefit equally. It applies to all alike. The veteran whose illness does not require hospitalization receives his cash benefit and thus his needs are met.

The veteran whose illness does require hospitalization can select the hospital of his preference and without delay obtain admission. He can select the type of service which suits his needs. For example, a ward bed or a private room. He can select his doctor. While he is confined in the hospital he will continue to receive his cash benefit which will take care of the needs of his family.

Under the insurance plan of benefit every veteran shares alike in the benefits. The needs of every disabled veteran are met regardless of the character of his disability, regardless of his location, regardless of whether the illness requires hospitalization or not.

As to the Cost of Administering the Two Plans. In order to make possible calculations as to the cost of administering the insurance plan the sum of twenty dollars per week is set up as the cash benefit, and the sum of twenty dollars per week as the hospital benefit.

A capable actuary of large experience, Mr. W. H. McBride, of the National Life and Accident Insurance Company, Nashville, very kindly made the following estimates of disability:

"Number of weeks of disability expected from a group numbering 4,000,000 in 1930, ages 31 to 40, inclusive, in *successive years, excluding those attaining age greater than 60.

"1931	4,357,291
1936	4,132,507
1941	3,889,594
1946	3,573,334
1951	2,874,558
1956	1,149,620
1959	267,919

The rates of disability here shown are much higher than would be expected in a group of 4,000,000 veterans of the World War for the following reasons:

The physically unfit are largely eliminated. Certainly veterans as a whole are better risks than any other group of similar numbers that could be mentioned. The mortality experience in the war risk insurance demonstrates veterans to be superior risks as a group.

The disability rate in an industrial group is notoriously high, and the figures furnished by Mr. McBride are based upon his experience with such a group. At any rate, a liberal estimate of the disability rate to be experienced in a group of veterans would be one week of disability per year per man. Four million veterans would give a disability experience of four million weeks of disability per year. The cash benefit to these veterans would amount to $80,000,000 per year.

Assuming that ten percent of the weeks of disability would require hospitalization, the hospital benefit would cost $8,000,000 per year.

Assuming that the overhead costs of administration would be five percent of the total benefits this item would amount to $4,400,000 per year.

The two benefits plus the costs of administration would amount to $92,400,000 for the first year. The disability rate would diminish each year and

*Figure for each five-year period is given instead of each successive year.

the costs would decrease accordingly. By the year 1959 the cost would be negligible.

This form of benefit would cease at age sixty. It is assumed that those veterans who attain an age beyond sixty years would be taken care of by some other form of benefit. For example, a pension or domiciliary care in soldiers' homes already in existence.

The Cost of Administering the Hospital Plan of Benefits. There are at present fifty-three veterans' hospitals with a capacity of 25,940 beds.

It is estimated by the Medical Council of the Veterans' Bureau that 129,859 beds will be required to meet the needs of the veterans of all wars.

The cost of maintenance is $4.42 per day, or $1,613.30 per year per bed.

The average cost of construction is $3,500 per bed.

The cost of the professional staff is $151.56 per bed per year.

The average cost of transportation to and from the hospital is $30.58 per veteran admitted.

The cost of equipment is not obtained, but this item is large.

These statements of costs were furnished by the Acting Director of the Veterans' Bureau.

The cost of constructing the 103,939 beds additional to make the total 129,859 would be $363,786,500.

The cost of maintaining 129,859 beds would be $209,501,524.70 per year.

The cost of the professional staff would be $19,681,430.04 per year.

The cost of transportation and equipment cannot be estimated.

The cost of two items alone, viz., hospital maintenance and professional staff, would be $229,182,954.74 per year.

These figures furnish ample evidence to show that the insurance plan is by far the more economical of the two.

Under the insurance plan when the last veteran has attained age sixty the plan ceases to exist. The costs have scaled downward through the years until the costs become *nil*. Under the hospital plan of benefits the costly buildings and equipment are to be abandoned and the staff disbanded, or a new policy concerning their administration inaugurated.

A new policy of administration certainly would be in the interest of keeping the beds occupied and the staff employed. It logically would be in the nature of extending hospital benefits to the families of veterans, and thus the expense could be continued and the scope broadened to the extent that medicine and hospitals in America would become almost completely or very largely federalized, thus making for almost complete state medicine.

Since the resolution was adopted a few criticisms have been made which should be discussed here.

One criticism is that the insurance plan is offered purely in the interest of doctors. Such a criticism is unfounded. In fact, it will be noticed that there is no provision in the policy proposed for medical or surgical fees.

Such a benefit is often found in disability policies written by standard companies. It was purposely omitted because such a criticism was anticipated.

Doctors as a whole would receive a larger financial benefit from the hospital plan. It will be noted that the cost of the staff would be $19,681,430.04 per year under the hospital plan. Doctors could not hope to benefit to this extent under the insurance plan. In fact, doctors would not benefit directly at all.

Another criticism is to the effect that unethical doctors and crooked veterans would enter into collusion to defraud the government. This is a slam at both doctors and veterans. In reply to this criticism I would say that if such a large proportion of doctors were capable of such crookedness such large insurance companies as the Metropolitan and others could never have been built up. The basis of a claim with any disability insurance company is a certificate by a physician.

Fraud doubtless is perpetrated occasionally. Every business on earth has had its experience with frauds. Even the Veterans' Bureau. The veteran could be hospitalized unnecessarily under the hospital plan which would be a fraud also, and from the standpoint of the government, a more costly fraud.

It is intended that the Veterans' Bureau force be augmented so as to administer the act. This force would detect and combat fraud. This force disallows the claims of veterans every day under existing laws.

I believe I can say on behalf of organized medicine that we would favor and sponsor any measure seeking to eliminate fraud completely from this and all other forms of administration where a doctor is brought into the case.

Doctors are vitally interested in a matter of far greater importance to the public and the profession than the temporary income of some doctors, and that is the subject of *state medicine*.

Veterans, in my opinion, would be interested if they were to give this matter serious thought.

One form of state medicine is that in force under the government hospital plan of benefits to veterans. It has these elements: The sick individual has no voice in the selection of his doctor—no voice in the selection of his hospital. The doctor does his tour of duty wherever he is assigned. The proper relation between doctor and patient is destroyed. The German system of medicine has this element to a large extent. It was Prussianism we went across the seas to destroy.

In America, medicine and surgery have made more progress than in any other country on earth. The public of the United States as a whole get the best medical, surgical and hospital service of any people on earth. This wonderful system has

grown up as a part of our democracy. In this democratic system the patient selects his doctor. The doctor serves those who want him. His clientele grows in proportion to his reputation for good service. The same applies to hospitals.

If democracy in medicine must go—well, then let democracy disappear from the earth altogether as a false philosophy of life and living. Let's apologize for the efforts of our forefathers in establishing a democracy. Let's also apologize to Germany for the destruction we wrought to their Prussian system.

This insurance plan of benefits to veterans is offered in the interest of all. It is in the interest of veterans primarily. It is in the interest of equality of benefits as between veterans. It is in the interest of economy in governmental expenditures. It is in the interest of democracy in medicine—that system which has brought to the people of the United States the highest type of medical service to be had on earth.

ABSTRACTS

PERENNIAL POLLEN DESENSITIZATION

WARREN T. VAUGHAN, Richmond, Virginia, *(Journal A. M. A.,* July 11, 1931), describes the technic of perennial pollen desensitization and enumerates its advantages thus: (1) Intensive preseasonal treatment is avoided. The patient is not restricted to one locality for a month or more for treatment prior to the season. (2) As far as allergy is concerned, the patient's general health throughout the year appears to be better, at least in certain cases. Ragweed allergen extract acts specifically against ragweed pollen inhalation and nonspecifically, either in increasing the tolerance to other allergens or in lessening the vagotonic response. (3) There appears to be a decreased tendency toward unfavorable reactions. One can scarcely say that they cannot occur, but if they do they are more likely to be due to faulty administration, such as the penetration of a small venule. (4) Treatment may be started at any time of the year. This enables the physician to avoid bunching his patients during the pollen season and having scarcely any work to do in this line at other times. (5) Another advantage is that there is more available time in which to accomplish complete desensitization in the rare extremely sensitive case requiring minute increases each time. Here "rush" desensitization is impossible. (6) There is some evidence that leads one to hope that if perennial desensitization is continued long enough an actual permanent cure may be effected. Even if sensitivity does return, the patient may have experienced two or more years of freedom following the final cessation of treatment, a surcease that will be welcome even if temporary.

CHROME POISONING WITH MANIFESTATIONS OF SENSITIZATION

ADELAIDE ROSS SMITH, New York *(Journal A. M. A.,* July 11, 1931), discusses the case of a man with a history of numerous attacks of asthma and hay-fever who became acutely ill after his second exposure to ammonium bichromate, an interval of some weeks having elapsed between the first and second exposures. The illness was characterized by skin lesions, asthma, nephritis with glycosuria, acute myositis and fever. An intradermal injection of 0.5 percent ammonium bichromate solution resulted in a marked local reaction at the site of the injection and also produced reactions at distant areas which had previously been exposed to chrome. In considering the picture presented, it seems that considerable importance must be attached to the part played by sensitization. In the first place this was an "allergic" type of individual, as indicated by the history of hay-fever and asthma. In his history of exposure to the chrome compound there was first a dermatitis without other symptoms, followed by an interval of freedom from exposure during which the skin lesions cleared. This was followed, on second exposure to chromium, by an ulcerative dermatitis which was soon accompanied by systemic symptoms. Recovery followed when exposure to chromium ceased. Such a sequence of events seems to indicate that, following the initial dermatitis, the patient became generally sensitized to chrome or to a tissue compound of chromium. This hypothesis is supported by the fact that the intradermal injection of a chrome solution produced a "lighting up" of the patch test site and also of the hands where the tissues had been previously exposed to chromium. These were interpreted as focal allergic reactions. The widespread erythema and distant urticaria which also followed the intradermal injection showed a less intense general sensitization of the skin, which may have resulted from absorption. The picture presented by this case is so complicated that it is impossible to be certain how large a part was played by sensitization or by chrome intoxication. It seems probable that it should be explained as the case of an individual who became generally sensitized to chrome and was therefore poisoned by a comparatively mild exposure.

HOW EARLY DO PHYSICIANS DIAGNOSE CANCER OF STOMACH IN THEMSELVES?

WALTER C. ALVAREZ, Rochester, Minn. *(Journal A. M. A.,* July 11, 1931), analyzes forty-one consecutive case histories of physicians with cancer of the stomach. The patients were all operated on at the Mayo Clinic in the last seven years. In twenty cases the symptoms were of fairly short duration with an average of about twelve months. In eight of these the duration was five months or less. One patient never, at any time, suffered with indigestion. Often it was hard to understand how a physician could have let himself go for so long a time without a roentgen examination. Able clinicians in large cities were just as careless about their health as were general practitioners in the "backwoods." In some cases the final disaster was due to the fact that the patient had always been bothered by chronic indigestion and hence failed to become alarmed when the symptoms changed in character and became more severe. In seven cases it is almost certain that the cause of the first symptoms of indigestion was an ulcer. In five additional cases it may well have been an ulcer, and in nine others the early symptoms of cancer were more or less characteristic of ulcer. In four cases the preoperative diagnosis at the Mayo clinic was gastric ulcer, and in four others the diagnosis of cancer was made only at operations. In still another case the patient had been operated on elsewhere for gastric ulcer without the true nature of the disease being recognized. Altogether, the question of ulcer intruded itself into the diagnosis in half of the cases, and in many instances the too ready acceptance of a diagnosis of ulcer by the patient and his advisers led to the final disaster. It seems obvious that the only way in which one can hope to cure cancer of the stomach is to excise it during the stage in which it looks and behaves like a benign ulcer. It would help much if every disturbance of digestion that appears suddenly in a middle aged or elderly man or woman would be looked on with grave suspicion. It is the patient with the short history that the experienced gastro-enterologist has learned most to fear.

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Albert E. Bulson, M.D., Editor and Manager

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EDITORIALS

COLLATERAL CIRCULATION IN THE LUNG

The study of aerodynamics involved in the physiology of respiration has revealed some very interesting and important facts. Bronchial occlusions are now regarded as a basic factor in the production of many acute pulmonary disturbances such as massive postoperative atelectasis or collapse, postoperative pneumonia, etc. An interesting contribution to this subject is an article by Van Allen and Lindskog* on "Collateral Circulation in the Lung". The authors show by some surprisingly simple experiments that the bronchial tree in a lobe of the lung is not a blind ending series of tubes at the periphery of the lung, but that there are interconnections between the trees within each lobe. These connections make possible a collateral circulation of air in the lobe, which circulation is of great importance to proper respiratory function. They show that if it were not for these interconnections any exudate in a bronchiole would be very difficult to expel by coughing, as the force brought to bear on the exudate must be distal to the plug, and this can be obtained only by reinforcing the column of air by way of interconnections between the tubules in the lobes. The presence of such an exudate in the absence of a mechanism permitting rapid expulsion would be a continual menace to lung function, as absorption of air would quickly result in atelectasis in the lung periphery distal to the plug.

SUPER-MEDICAL EDUCATION

Every now and then we hear or read a protest concerning the super-education that seems to be foremost in the minds of those who control the destinies of our large educational institutions. We are interested especially in the discussion pertaining to the education of physicians and nurses, and we are quite prepared to fall in line with the growing sentiment that we are standing up so straight that we are falling backward in our efforts to create a uniformly useful physician and nurse for service among the average run of our population. In our medical schools there is too much of a tendency to emphasize the technical phases of the theory and practice of medicine, and not enough attention is given to the commoner or most needed factors pertaining to the treatment and alleviation or cure of disease. In our schools of nursing we are attempting to turn out nurses who know almost as much about medicine and surgery as does the recent graduate from a medical school, and in doing this we are neglecting some of the practical instruction and application of nursing knowledge so necessary for the proper care of from eighty to ninety percent of our people who are ill. It is only a small percentage of our sick who need the services of a highly trained, technical nurse. Likewise it is true that a very large percentage of people who become ill first need the services of a good general practitioner, and while we regret to say it, we believe that our medical schools of today are not turning out men for the general practice of medicine who are equipped as well as they should be for practical work. They have been drilled in a large number of specialties, getting a smattering of this and a smattering of that, but not getting enough of the real fundamentals so necessary for the best type of service. This tendency toward specialism is reflected in the examinations given by medical and nursing boards, and our readers may remember that we have printed some of the idiotic questions pertaining to technical subjects, about which even many medical men know little or nothing, that have been given prospective nurses to answer when taking examination for licensure. The same is true of examinations by medical boards, and it is regretted that some medical boards seem bent not upon knowing how well a recent medical graduate is fitted for the general practice of medicine, but how well he is equipped to practice some specialty.

In commenting on this subject, Dr. Harvey Cushing, the well-known surgeon of Harvard University, says (address before the Massachusetts State Medical Society) that "this super-education that we are insisting upon now is depriving the people of an adequate number of well-trained general physicians, for the exactions imposed upon those who would practice medicine are so severe as to discourage candidates, and the time is coming when there will be too few medical men to meet the demand." On the other hand, Doctor Cushing says, our super-education is prompting the development of numerous pseudo-medical cults the members of which, having had little education and training, are licensed to practice their peculiar belief but who in turn try to utilize the methods and practices employed by regular practitioners of medicine. This is a serious matter.

Another phase of this question is the increasing tendency on the part of our medical graduates to plunge into specialism without adequate training or education for special work, and many of them are encouraged in the decision to take up a

*Surg., Gyn. and Obs., July, 1931.

specialty because they believe that they have gained considerable knowledge of the specialty while undergraduate students, and they feel that special practice offers pleasanter and more remunerative work. The end result is a horde of embryo or amateur specialists who are preying upon the public and doing themselves and everyone else injustice through their lack of education and training for the work they are attempting to do. So glaring has this fault become that the American Medical Association has been asked to attempt to put into effect some plan whereby physicians who hold themselves out as specialists in any branch of medicine and surgery shall be certified by a special board as being qualified as specialists.

There is, however, as pointed out by Doctor Cushing, a crying need for more and better general practitioners of medicine, and a cessation on the part of our educational institutions of attempts to cram undergraduate students full of a lot of technical knowledge concerning the specialties, at the expense of a broader training that is required for general practice. Our boards of medical registration and examination would be doing a very wise thing if they tightened up in their severity as pertains to qualifications for the general practice of medicine, and pay less attention to the specialties which should be left to special boards.

SUPPORT THE COUNCIL ON PHARMACY AND CHEMISTRY

Very recently a detail man called upon the editor of THE JOURNAL and glibly talked about the uses and value of a proprietary remedy that has been turned down by the Council on Pharmacy and Chemistry of the A. M. A. as not being particularly trustworthy and not coming up to the claims made for it by the manufacturers. When he was told that his product would not be considered until it had been approved by the Council he promptly countered by saying that the most representative physicians in Indiana paid no attention to the Council's findings and the majority of them were using the product.

We honestly believe that the man was lying, but admitting that there was some truth in his claims concerning patronage accorded his product, we are prompted to say that we are ashamed and humiliated by the admission that there may be some apparently prominent and respected members of the Indiana State Medical Association who are as gullible as an inmate of a feeble minded institute when it comes to accepting and using proprietary remedies the composition, formula and uses of which are unknown except through the claims of manufacturers or glib salesmen who not infrequently lie like a lot of turnip thieves in order to promote sales.

Our American Medical Association has established and is maintaining at large expense a Council on Pharmacy and Chemistry that is operated wholly in the interest of the reputable and progressive medical men of this country, and their findings are unbiased and trustworthy. Why in the name of common sense should any physician worthy of the name ignore the suggestions and advice given by this Council, and why should any physician neglect to avail himself of such trustworthy help. We are reminded of the comic opera song which we heard many years ago, each verse and the chorus of which ended something like this, "For we are only weak-minded creatures after all." We would change it a little and say that some are more feeble-minded than others.

PHYSICIANS SHOULD SHUN STATE MEDICINE

If state medicine is established in the United States it will be as a direct result of the complacency and tolerance exhibited by the medical profession as a whole. Unfortunately there are a certain number of medical men who feel that they would be quite satisfied to have a so-called easy and permanent berth secured by assignment to a salaried position which they think may be more or less permanent. Such men never stop to think what may happen to them as a direct result of politics or discrimination in the selection of employees, and last but not least, what may happen to them in the way of repeated adjustments of compensation, oftentimes downward rather than upward. Analyzing the proposition from all sides, state medicine is a bad thing for everyone concerned, public and profession alike, but if we consider the matter from the economic standpoint alone it is suicidal for medical men to consider the matter favorably. What we need is a stimulation of the feeling that the practice of medicine belongs to medical men, but medical men in turn owe to the public as well as themselves the rendering of the very best type of service to any and all people at any and all times, and for that service medical men should be paid adequately. We long have been imposed upon by welfare organizations and individuals, and figuratively speaking we have been the easiest of marks for anyone who has tried to exploit us for any kind of gain. It is time for us to exhibit a more independent spirit but at the same time render more and better service to those who need it.

INSURANCE AND COLLECTION AGENCIES

Once more we desire to repeat what we have said time and time again concerning the folly of placing confidence and patronage with indemnity insurance companies or collection agencies without first thoroughly investigating the standing and trustworthiness of such institutions. Hundreds of physicians in Indiana have been deceived and

sometimes actually swindled by collection agencies, and many a hard-working physician who has been placing his insurance in some indemnity company, whether for accident, property damage, sickness or life, later has discovered to his sorrow that he has been spending money for a policy that is worthless or near worthless in consequence of restrictions or unfair interpretations on the part of the insurance company. Some of these companies have wily representatives who are smart enough to get endorsements from a few prominent men, and that usually is sufficient to insure getting business. We cannot make the warning too strong, and particularly in these strenuous times, as to the unreliability and untrustworthiness of about seventy-five percent of the cheap indemnity insurance companies, and about ninety-nine percent of the collection agencies. Furthermore, don't let any glib salesman tell you that his company has the endorsement of the Indiana State Medical Association, or The Journal, for neither the Association nor The Journal is in the endorsing business. We feel like iterating and reiterating the warning issued by better business bureaus which is as follows: "Investigate before you invest."

SERVICE AND COMPENSATION IN INDUSTRIAL CASES

One or two industrial insurance companies doing business in Indiana apparently have a stereotyped letter which they send every physician after receiving a bill for professional services rendered in an industrial case, and the letter invariably starts out by saying that the charges are excessive, and that settlement will be made when the amount of the bill is reduced. It doesn't seem to make any difference what the services are, the character of the services, or by whom rendered, the complaint is the same. A member of the legal fraternity says, "When you doctors begin to refuse to do work for which a brow-beating insurance company is supposed to pay, and for which in the final analysis the employer is taxed, you will get somewhere in securing reasonable compensation for your services in industrial cases."

There is another feature of this matter which is deserving of some consideration, and which should be called to the attention of the labor unions, and that is the kind and quality of service that is to be rendered in industrial cases. The injured employee deserves and should have adequate and trustworthy service at the hands of reputable and experienced medical men, but they are not going to get such service if insurance carriers are quibbling over reasonable bills and are insisting that quality of service is not to be considered. It might not be a bad idea for our Committee on Civic and Industrial Affairs to make an investigation concerning the reputation of industrial insurance carriers for the purpose of determining how well and faithfully those carriers take care of injured employees and how fairly they deal with them and the medical men who render service. A list of certified insurance companies would be a good thing, and while we are on this subject we might as well say that a list of approved insurance carriers of any kind wouldn't be a bad thing for the members of the Indiana State Medical Association if they wish to avoid being imposed upon. We are getting so many reports from physicians from various sections of the state concerning devious ways in which they have been imposed upon or swindled by insurance companies that we are beginning to think that some effort should be put forth to protect the members of our Association and at the same time the industrial employee will be helped.

NEWSPAPER COMMENT ON CODE OF ETHICS

Editorial Note from The Journal of the Indiana State Medical Association: "At the Philadelphia session of the A. M. A. a prominent layman said: 'We do not need more doctors, but more *better* doctors,' to which he might have added that what we need is more people who will appreciate better doctors and compensate them more adequately for the services rendered." As a matter of fact, sir, he *might* have added that what we also need is a new code of "ethics" which will not prevent a good doctor from telling a layman that one of his fellows of the medical fraternity is actually a dumb, dangerous quack. An innocent child may be at the point of death, improperly treated by an old fogey who chances, somehow, to have picked up an M.D. The condition of that child may be reported to a good doctor. But the good doctor can't take the case and save the child's life until either the perhaps ignorant parents dismiss the blunderer, or somehow contrive to have the blunderer call upon the good doctor for consultation. No, the good doctor can't save a life except with the express permission of the quack. The "ethics" of the profession do not permit him to sound warnings against the "respectable" quacks among his fellow-practitioners.—*Fort Wayne News-Sentinel,* July 28, 1931.

Our comment: We do not need a *new* Code of Ethics. Our present code provides rules of conduct that are more beneficial to the public than to the medical profession. Without the Code of Ethics, which is followed by a majority of the reputable physicians, quackery would be more prevalent than it is now. Who is responsible for medical quacks and medical pretenders? The newspapers that advertise them and help fight their battles in the legislature! Medical quackery would die a natural death without the support of the lay press and the politicians who profit directly or indirectly as a result of that support. Incompetent medical men never will be licensed to practice medicine except through the influence of newspapers and politicians who prevent legislation proposed for the purpose of establishing a reasonable standard of qualifications for all those who attempt to treat the sick and suffering. A howl goes up about a "doctor's trust" and "making it hard for the poor boy to enter the medical profession" every time an effort is made to improve the standards of medical prac-

tice, and in consequence we have chiropractors and other medical pretenders, most of whom do not possess a common school education, and none of whom know much of anything about the human body either in health or in disease, who are licensed to practice medicine and to impose upon the public. An ailment, diphtheria for instance, curable in the hands of an educated and trained physician, ends disastrously, perhaps fatally, in the hands of a chiropractic pretender. Who makes it possible for these and other quacks to exist and prosper? Newspapers and politicians who sell their souls for a mess of pottage. The medical profession never yet has advocated any medical legislation that has not been of more value to the public than to the medical profession. The Code of Ethics may be hoary with age, but as much may be said of the Ten Commandments. The Code of Ethics includes rules of conduct that are a protection to medical men and public alike, and it would be most unfortunate if the code were abolished or radically changed. If and when the public desires to rid itself of quacks and medical incompetents, it can clear the field very quickly if the newspapers will aid in the undertaking, but it takes *newspapers with a conscience* to suppress medical quackery that is profitable to the lay press. The regular medical profession, through its established organizations, at all times is trying to improve the morals and standards of fitness of those who care for the ill. It should be encouraged in its undertakings. Medical quackery criminally preys upon the sick and suffering, more often upon the poor and ignorant who most need protection, but the lay press does little to suppress medical quackery, and it even goes out of its way sometimes to criticize the regular medical profession in its laudable attempts to suppress or wipe out any tendency toward quackery within its own organization. In these days when trickery and chicanery of every kind seem to be profitable, it really is expensive to be good, and we are prepared to take our hats off to the lay publication that has a conscience when it comes to the consideration of suppressing medical quackery.

INTENSIVE POSTGRADUATE COURSES

The University of Michigan Medical School and the Michigan State Medical Society have announced a third annual program of courses for graduates to be given at Ann Arbor and Detroit. The course includes two weeks' intensive general instruction, covering the recent developments in medicine, surgery and obstetrics. Instruction is given at bedside clinics rather than by formal lectures. In addition to the general course, special courses covering intensive clinical demonstrations in the specialties have been arranged. This is the third year that these courses have been given and they have met with general satisfaction and large attendance on the part of the medical men of Michigan. We would like to inquire why we cannot give such postgraduate courses here in Indiana. There is absolutely no reason why the Indiana State Medical Association in conjunction with the Indiana University School of Medicine could not put on such a course as is provided in Michigan. We have the clinical facilities in Indianapolis, and we have the teachers. Other states than Michigan are giving postgraduate courses and it looks as though Indiana is overlooking an enterprise that can and should be put into effect. The postgraduate courses should be intensive in character and need not necessarily be confined to Indianapolis, but could be given in rotation in other cities like Evansville, Terre Haute, Fort Wayne, and South Bend. The courses could be given by the instructors connected with the University who are familiar with teaching, although there are a large number of prominent well-trained men not connected with the University who could help in giving the work.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

THE Indiana State Medical Association meets in annual session at Indianapolis, Wednesday, Thursday and Friday, September 23, 24 and 25, 1931. *Don't forget!*

THE preliminary program for the Indianapolis session is published in this number of THE JOURNAL (page 450). Please observe that there are no section meetings. All papers and addresses will be delivered before the general meetings.

READ the article by Dr. Shoulders, in this number of THE JOURNAL, on "Medical Hospital Service to World War Veterans". It is a subject of much importance to medical men and veterans alike, and in the final analysis it is a matter of great concern to the taxpayers who pay the bills for the service.

WE notice that one or two state medical journals have investigated and recommended certain collection agencies. We never yet have investigated a collection agency and found that we unhesitatingly could recommend such agency. We have

come to believe that trustworthy collection agencies are rare birds.

The American Medical Association has taken a very definite stand in an endeavor to establish proper qualifications for physicians who desire to engage in special practice. This is a move that long has been needed, for the public is suffering from too many half-baked specialists of one kind or another, and it is high time for the people to be protected from amateur specialists.

If there is anything that actually peeves us it is to hear someone talk about using the latest medicinal therapy from Germany. Ye gods! Some of the worst medical frauds and therapeutic inconsistencies come from Germany, but they are not advocated or used by the really scientific medical men of that country, though given credence by many physicians and lay persons in America.

A United Press item from Winona Lake, Indiana, dated July 7, 1931, says, "A resolution preventing the further sale of ice cream on Sunday 'because it is sinful in the eyes of the Lord to eat it on Sunday' failed to pass." Perhaps they would like to prohibit the use of palm leaf fans and also a smile when you encounter a cooling breeze during this scorching hot weather. Religion sometimes breeds peculiar inconsistencies.

Not infrequently The Journal is quoted by newspapers and lay periodicals as well as medical journals, usually in praise but sometimes in good-natured criticism, and we especially appreciate the fact that occasionally both the *Literary Digest* and *Time* quote us and comment favorably upon some of the opinions expressed. We at least have the comforting feeling that The Journal is being read.

Concerning the question of advertising by the individual physician, we like the opinion expressed in the last paragraph of an editorial in *American Medicine* for May which says that the advertising doctor's success in a measure would depend upon hiring the cleverest advertising counsel, rather than upon being best equipped to serve patients intelligently and trustworthily, and being of greatest service to public health and the community at large.

It will be a little tough on the eye, ear, nose and throat men if they attend the session of the American Academy of Ophthalmology and Otolaryngology an entire week, and then the following week attend the annual session of our State Medical Association. However, we note that the eye, ear, nose and throat men are about as loyal in attendance at the State Medical Association sessions as are those following any other branch of medical practice.

For monumental nerve we take our hats off to the fellow who drives up to a physician's office in a new Packard car and calls upon the physician with the idea of asking for an extension of time for the payment of a long-over-due bill for professional services, or more than likely to put up a kick about the quality of the services as an excuse for non-payment of a long-over-due bill. We sometimes think that such guys ought to be shot at sunrise like deserters from the army.

Indiana sent seventy-seven representatives to the Philadelphia session of the A. M. A. That is a very poor showing. Even California sent a larger representation, and Illinois, Ohio and Michigan sent from two to four times as many. In Indiana we need a great awakening in the interest of organized medicine and less affiliation with societies that do not truly represent organized medicine and in many instances are commercial affairs with commercial ends in view by the sponsors. Let's get back of the A. M. A. to a greater extent than ever before.

A dentist in a small city told one of his patients that he was not sure whether she had pyorrhea or not (evidently missed his calling) so he referred her to a "pyorrhea specialist" to whom everything is pyorrhea, with the result that a gum dissecting and stripping operation was performed. The result was a hyena-like appearance of the teeth, and hypersensitive exposed necks of teeth that have given discomfort ever since. Why do not conservative and well-trained dentists decry these unnecessary and profitless mutilating gum operations performed by so-called pyorrhea specialists?

The use of bran as a laxative food has become so popularized that the public has come to believe that it is harmless, but a dietitian of The Mayo Clinic says that bran is one of the most indigestible foods to be found in nature, and it is especially designed to give intestinal obstruction requiring operative attention for relief in those patients who already have a partial obstruction or sluggish intestinal tract. Every once in a while a death from bran obstruction is recorded, verified by operation or perhaps by autopsy, so it is just as well for physicians and public to be acquainted with the possibilities.

A medical friend has asked for an opinion concerning the publication of one of his articles in a well-known commercial publication sent to thousands of doctors, good, bad and indifferent, and there is an intimation that by such means the article would receive wide circulation. Quite true if you are after circulation and advertising, but why not publish the article in some family almanac or get Procter and Gamble to print the article on the wrappers of Ivory soap? We don't quite understand the working of the mind of the

physician who supports or contributes to the rankest kind of commercial medical journals.

As usual the celebration of our national birthday resulted in thousands of fireworks accidents, among which were several hundred eye injuries, some of them ending in the loss of eyesight. Why in the name of common sense do we not have laws prohibiting the sale of fireworks and particularly to young children? For a long time we have been talking about a safe and sane Fourth of July, but we do not seem to be any nearer the goal than we were twenty-five years ago. We should find some way of celebrating without blowing off fingers and burning out eyes. Here is a chance for public health officers and welfare workers.

WHEN we look at some of the advertising in some of the commercially inclined medical journals we wonder why Lydia Pinkham's Vegetable Compound is omitted. We have an idea that that kind of advertising could be secured for medical journals, and if, as we sometimes think, money is the principal object that influences some medical journals in accepting advertising copy, there is no reason why there should be any objection to carrying advertising of Lydia Pinkham's products. Of course Lydia has been dead for lo! these many years, but perhaps she would arise from the grave and call medical editors blessed if they saw fit to perpetuate her name through her well-known vegetable compound.

WELL, here is an interesting piece of news. In one of our populous communities the school board and parent-teachers' association are recommending that children of the community be made ready for school in the fall by having tonsils and adenoid tissue removed at $8 per remove, and all comers served without distinction. One physician calls it "flivvering" tonsils and adenoid tissue, but what we call it would not look well in print! Medical men are at fault when they tolerate that sort of thing, and where will it end? In the final analysis isn't the public irreparably harmed by the type of department store medicine indicated, and by the iniquitous effect of so much welfare medicine and surgery that is instituted and carried out without rhyme or reason?

DIPHTHERIA prevention is taken seriously by the city of Evansville. A year ago seventy-five percent of all public school children had received three or more injections of toxin-antitoxin, and now this percentage has been increased so that approximately eighty percent of all children enrolled have received some immunization treatment. Progress is believed due to the greater interest of the general practitioners in the educational work of the schools, and the cooperation of the City Board of Health. Of especial interest is the increase in the number of children who receive immunization treatment prior to enrollment at school. Recently an effort has been made to awaken public interest to the need of the Schick test subsequent to the administration of toxin-antitoxin.

IT is enough to make a horse laugh to hear presbyopic Christian Scientists bragging about seeing perfectly for both distance and near without the aid of glasses. Of course if one is to put faith in the Christian Science logic there should be no occasion for wearing glasses to improve vision, to carry an umbrella to keep from getting wet, or to wear an overcoat to avoid getting cold. On several occasions we have been able to prove that Christian Scientists had been deceiving themselves, even though they did not deceive anyone else, by showing that they could not by any juggling of Christian Science faith see normally for either distance or near without the aid of glasses. An analysis of Christian Science cures usually ends disastrously for the Christian Scientists, but some people are happy in their delusions.

HERE is a new one for these troublesome times. A patient who had undergone a major operation at the hands of an experienced surgeon and was making a perfectly satisfactory recovery turned up later at the surgeon's office and refused to pay the bill for operative attention on the ground that carelessness at the time of the operation had resulted in an infection which required the services of another physician to combat. Upon investigation it was found that the patient did *not* have an infected wound or any untoward symptoms following the operation, and consulting a member of a pseudo-medical cult was a mere gesture to avoid payment of the surgeon's bill. Fortunately the scheme did not work, for a good lawyer proceeded to collect not only the amount of the surgeon's charges but a substantial additional amount for expenses.

THE City Health Department of Cincinnati has been presented with ten thousand dollars for the purpose of purchasing an x-ray machine and partially paying one year's salary to an x-ray technician, the gift being from an insurance company. That is a good precedent to establish, but we are just wondering if some of our tax-supported enterprises may not suffer if the idea prevails that funds for operation will be forthcoming through donations of insurance companies, corporations, or benevolently inclined individuals. Adequate equipment is absolutely essential for the detection and treatment of disease, and if it cannot be obtained in any other way it is a grand and glorious feeling to know that it will come through the generosity of an insurance company or some other agency that is able to afford the expense.

Probably few members of the Indiana State Medical Association realize just how far The Journal goes in protecting their interests by exposing fraudulent practices aimed at the innocent physician, and in refusing to accept advertising that is fraudulent, deceiving or in bad taste. If we followed the course of some commercial medical journals we would accept a lot of advertising that now is refused and profit financially in so doing, but we feel that The Journal owes something to the profession of the state in upholding the highest ideals, even though it costs money to do so. In taking a radical stand on this question the profession of the state ought to give its unqualified support, and incidentally the profession can show that it does support trustworthy pharmaceutical houses by patronizing the advertisers in The Journal.

In a populous county in Indiana the trustee, upon whom falls the duty of caring for the indigent, unhesitatingly gives orders for x-ray examination, laboratory work and hospitalization, for all of which the county pays, but he refuses to give orders for medical and surgical service and pointedly says that medical men can look out for themselves as to securing compensation. That's a fine attitude to assume, but isn't it the fault of the medical men in being such willing dupes in caring for the indigent when that is the duty of the community? The principle of the thing is wrong, and some effort should be put forth to correct the unfair condition. Of course the roentgenologist, pathologist, and the hospitals should be paid for their services, but why exclude the physicians and surgeons in deciding who shall be paid at county expense?

The editor of the Wyoming Section of *Colorado Medicine* says that physicians and dogs are placed on the same plane in Wyoming through the same annual registration fee of $5.00 for each. It is reported that Wyoming has been charging and accepting $25.00 for a license to practice medicine in all of its branches, and that the contract is unlimited. When the legislature attempted to pass a bill requiring all lawyers to register annually, and pay a registration fee of $5.00, the governor vetoed the bill on the ground that it was unconstitutional. If it is unconstitutional to require lawyers to register annually it is equally unconstitutional to require doctors to do so. However, doctors are and always have been apathetic when it comes to taking any decided stand to protect their own interests. Indiana doctors are no different than those in Wyoming on that score.

A man giving his name as Frank Brown, age seventy-two, livestock dealer by trade and Indianapolis as his home, seems to have found a fertile field for fleecing people out of money by calling upon physicians for some trivial ailment, paying the bills to establish credit, but later returning for subsequent service and at that time borrowing cash which he does not repay. Inquiry directed to a man reported to be the swindler's son brought the following answer: "This crook might be located if you would write the police department at Toledo, Ohio. You must be the biggest sucker in the world to let any man get money off of you in the manner stated." If all reports are true more than one physician has been trimmed by the pleasant mannered Mr. Brown, whose present location is unknown though he may be living comfortably through his panhandling operations among physicians.

Of late years it has become a practice to solicit votes openly and in political log-rolling fashion for the presidency of our medical organizations, not omitting the great A. M. A. Aside from the fact that the practice not only is in bad taste but nauseating to many respectable members of the profession, it offers possibilities of keeping deserving men from being recognized, for there is an old saying that "politics makes strange bedfellows," and pulling wires for votes is not in the curriculum of high-grade medical men. The wholesale soliciting of votes for an honorary office seems undignified and should be frowned upon. The presidency of any medical society should be an honor and one bestowed upon a physician because of his professional qualifications, his adherence to the ethics and traditions of the profession, and his activity and work in the organization that contemplates honoring him.

Much has been said in lay and medical press recently concerning the rapid increase of ringworm which seems to be due to the promiscuous bare-footed travel in and around swimming pools, club showers, Pullman cars, and hotel rooms, and even when around home if a member of the family is affected with the disease. An infected foot leaves shreds of the fungus on the floor which a healthy foot picks up. Prevention depends largely on personal hygiene, and as one author says, "One should not go barefoot even in one's own home, never in a carpeted hotel room, ship cabin, or train compartment." When in public bathing places, slippers should be worn. As treatment, tincture of iodine, solutions of permanganate of potash, gasoline, and x-rays have been recommended. One leading dermatologist says that there is nothing better than local applications of iodine, used just short of blistering.

In one of our Indiana cities a notorious deadbeat for many years had managed to avoid the payment of any bill for professional services rendered himself or any member of his family, notwithstanding the fact that he is a man of considerable means. Finally one pugnacious physician determined that he would make his claim a test case and sued for considerably more than his original bill, and without contest secured

judgment for the amount of the bill plus costs. A shrewd deputy sheriff discovered some tangible property, got an execution, and not only secured a settlement for the physician's claim and all expenses, but succeeded in getting the deadbeat indicted for perjury in connection with a false but sworn statement concerning property ownership. Probably physicians run up against such deadbeats very frequently, and if a little time, effort and perhaps money were expended in forcing payment of just obligations there would be fewer people trying to beat the doctor.

FROM all the discussion, and there was plenty of it, in the Philadelphia session of the A. M. A., it is very evident that the leaders in the medical profession have arrived at the conclusion, even though tardy, that the practice of medicine belongs to the medical profession and not to a lot of ambitious welfare organizations that in many localities are attempting to usurp the privileges and rights of licensed medical men. We always have felt that there is altogether too much welfare work done in the name of medical care, but for the most part it has been carried on without intelligent supervision and certainly without supervision by reputable medical men. Let's get back to first principles and have the sick cared for by those who are adequately qualified to care for the sick, and not turn the business over to a bunch of laymen with the aid and encouragement of public health or community nurses who oftentimes attempt to give the impression that they know more about the practice of medicine in one minute than any reputable medical man knows about it in a life time.

INDIANA is "bone dry," even to the point of prohibiting physicians from using or prescribing medicinal liquors, but notwithstanding all this it is interesting to note that the great American Medical Association through its House of Delegates has gone on record, without a dissenting vote, to the effect that the Volstead Law should be so amended as to permit physicians to prescribe medicinal liquor without the irritating restrictions existing at the present time. Well, all we can say is that there are many Indiana physicians who would be very glad to have the privileges now accorded to physicians in some of our adjoining states, like Illinois, where a physician's prescriptions for medicinal liquor, legitimately employed, are recognized legally. However, as we have said before, we have gotten along very well with the Indiana bone dry law, it being a controversial subject as to whether liquor has any place as a therapeutic agent, though there is no question but that whenever any sick or well person in Indiana has desired liquor for either medicinal or beverage purposes he has found little or no difficulty in obtaining it.

IT is reported that at Indianapolis a man, his wife and two children received gratuitous medical and surgical services the minimum cost of which would be two thousand dollars, and the service was rendered through the influence of a welfare organization. Later it was discovered that the man had been thrifty and saving, the result being a nice little bank account amounting to $10,000. Our point is that there is something wrong in the social service of any welfare organization that does not discover such impostors, of which there are many, who prey upon welfare organizations to the extent of receiving food, clothing, and more particularly medical and surgical services for which they are able to pay something. We also desire to call the attention of medical men to the necessity of insisting that some sort of investigation be made in private practice in order to avoid being imposed upon by those able to pay at least a reasonable fee for attention. Physicians as a general rule are exceedingly charitable and generous in taking care of the sick and suffering, but they should adopt some means of preventing some of the impositions practiced upon them regularly.

FEWER physicians would be complaining about losing patients and failure to collect fees for services rendered if they really were more thorough in their work and gave the patient trustworthy services. As an example we have just heard that the wife of a well-to-do farmer was treated by a general physician two years for stomach trouble, and during the entire time the physician never made a physical examination, never called for a sample of urine for chemical and microscopical examination, and did not even determine the blood pressure. Finally another physician was consulted who in the course of an adequate and careful examination determined that the patient had an advanced case of Bright's disease. There is no excuse for superficial and slipshod methods of diagnosis which are harmful to physician and patient alike. Furthermore, the average patient expects thorough, conscientious work, and is willing to pay adequately for it. However, whether the patient is able to pay for the services or not, no physician should be guilty of anything but as thorough and painstaking work as needed to arrive at trustworthy conclusions.

ONE of the saddest reflections of these days, and which causes considerable disappointment, is the general disrespect for law and order that is shown throughout the length and breadth of our land. Another thing that is discouraging in these times of depression is the growing lack of confidence in almost everyone's integrity and morals. A man who for years has maintained an unblemished reputation for fulfilling all of his moral and legal obligations suddenly is confronted with the opinion expressed by some of those with whom he does business that his reputation is worth absolutely nothing, and that the only thing that counts

now is material things and plenty of them. Such is the position of many who recently have been compelled to see just how far the commercially minded can go in exacting the pound of flesh. Is it any wonder that the cynics and even those of bolshevistic tendencies are increasing in number? There are those who have borne their grievances in silence, but some day, look out! There are those who have profited by exacting the pound of flesh who some day will regret, and who will seek friends that they do not find. "It's a long lane that has no turn."

There are one or two well-known pharmaceutical houses that seem to take special delight in spreading information to the effect that they are paying no attention to the findings of the Council on Pharmacy and Chemistry of the A. M. A., and are not interested in advertising in the state or other ethical medical journals for the reason that they find they can do plenty of business with medical men without paying any attention to official bureaus or official journals. That is just as much as to say that a majority of the reputable regular physicians, members of the state medical associations and a very large percentage of them Fellows of the American Medical Association are just a lot of dumb Doras who will put their faith in and give their patronage to firms that unquestioningly are deceiving us. It really is a little discouraging to think that so many of our confreres are such willing dupes in spite of all advice or warning. If physicians belonged to the ignorant class we could well understand how they would believe the first glib salesman who comes along telling him that the moon is made of green cheese, but for a so-called intelligent class of men to "fall" for so much deception as they do is beyond comprehension.

At this writing the daily press seems to be full of accounts concerning the scandalous conduct of welfare agencies in the distribution of funds, and we learn that in some instances not only have welfare workers been dishonest and appropriated for their own use funds donated for welfare work, but in the real distribution of funds to the presumably deserving there has been a riotous extravagance as indicated by the report that some of the indigent have been provided with such luxuries as Pullman berths, expensive clothes, gasoline and automobile repairs. However, in connection with all of these various exposes, we do not find that a single physician has profited, although there are undoubtedly thousands of physicians who have been at the beck and call of welfare agencies at all times to relieve the indigent and the poor, and always without expectation or promise of the slightest reward from treasuries that will pay very handsome salaries to executives and provide luxuries for the undeserving. It goes to show that the physician always has been and probably always will be comparable to the lowly Nazarene when it comes to the distribution of charitable services, and he is the only one that can be counted upon for charitable services at any and all times. Perhaps few physicians will sit with the apostles in heaven, but the majority of them have earned such a place, though they get scant credit in this world for the good they do.

Illinois has a state department of public welfare. Recently that department has discovered that it is being imposed upon by persons who themselves or through their families are able to pay for the housing, food, clothing and medical services that have been furnished gratuitously by the state. In some instances inmates of public institutions were found to have ten thousand dollars or more in funds, and yet they had for years been treated as charity wards by counties, and finally shifted over to the care of the state. Illinois is not the only state that has to contend with that sort of imposition, for it occurs right here in Indiana as noted in this number of The Journal, and the results of a thorough and comprehensive investigation of conditions probably would show a shocking state of affairs. Welfare organizations, whether supported by private or state funds, are the victims of impostors who receive charity when able to wholly or at least in part pay their own way. Medical men are notorious victims in giving of their time and skill to people presumably poor but who really are able to and should pay something for the service. Some of the welfare organizations are attempting to investigate all cases, but it seems to us that there is considerable overlapping of effort, and not enough systematic or business-like conduct of the investigations. We are strong for some kind of an organization that will systematize charity work of every kind and description, and put it on a basis whereby the public will know that abuses are kept within reasonable limits.

We read that the new men's golf champion, and the new champion prize fighter will realize a small fortune from endorsement of various commercial products. We have an idea that a majority of people are beginning to lose all confidence in endorsements of any kind, and so far as we are concerned personally we almost have come to the point where we place little confidence in the endorsement of checks during these troublous times. While we are talking on this subject we wonder what some of our prominent medical men get for their endorsement of commercial products. For instance, what does an ex-president of the A. M. A. get for endorsing a well-known brand of soap? Of course we realize that several thousand physicians were paid for endorsing Lucky Strike cigarettes, and they were easy marks, for it cost a mere pittance—a carton of Lucky Strikes for each endorsement. Now we hear about a lot of doctors who say that not only does toasting of tobacco make it less irritating, but that the ultra-

violet rays have the effect of making the tobacco more soothing. We believe that we are quite correct when we say that there probably isn't one of the doctors who make such statements who knows a thing concerning the subject. We blush when we think that so many of our confreres are so asinine, and as a mere side issue our profession is getting a reputation in the religious press to the effect that tobacco endorsements by physicians can be bought. Why can't we have a little more appreciation and support of high professional ideals?

ALBERT E. FALL, former secretary of the interior, will be forced to spend a year and a day in the Federal prison, after being convicted of accepting a bribe of $100,000 from Edward L. Doheny, an oil operator, notwithstanding the fact that Doheny was acquitted of the charge of having offered the bribe to Fall. Isn't that a fine sample of justice! If Fall is guilty then Doheny is guilty and both should serve a prison sentence. Then there is Capone, guilty of all the crimes in the calendar and by the score, finally convicted, or pleaded guilty to many of the charges, and is promised a short sentence. To make the punishment more severe Capone should be promised a Ritz-Carlton diet, a bed with a hair mattress, electric fans for hot weather, fresh flowers every morning, and champagne with his dinner at night. Then there is the poor woman in Michigan with a brood of young children to feed who was convicted three or four times for bootlegging in a small way and then railroaded to prison for *life* as a confirmed criminal and to satisfy one of Michigan's laws. Then there is the poor devil in Indiana, out of work, no money, hungry, and with a wife and several children crying for something to eat, and he gets a long prison term for stealing just enough food to stave temporarily the hunger of himself and family. Good law is good common sense, and justice not only should be consistent but tempered with some degree of mercy. Sometimes we think that physicians do not receive their just dues and too frequently are penalized unfairly and unnecessarily, but when we look about us and see so many poor devils that get rawer deals than we do we feel disposed to think that we ought to smile at most of our troubles.

IN the January 8, 1831, issue of the *Richmond Palladium* appears a quotation of prices from the Cincinnati market, including: Wheat, $.45 per bushel; corn, $.25 per bushel; butter, $.08 per pound; hams, $.06½ per pound; peach brandy, $.45 per gallon; Jamaica rum, $1.50 per gallon; whisky, $.24 per quart; and cider, $4.00 per barrel. In the same issue appears the advertisements of two physicians, headed by an illustration of the mortar bowl, and worded as follows:

DOCT. A. HINDMAN

Thankful for the friendly encouragement he has had since his residence in Richmond, wishes his talents and integrity to be still farther tried.

All the branches relative to the practice (when called upon) will, if circumstances admit, be promptly attended to.

Those who have cancerous diseases will do well to call and consult me, as such cases are cured here in a short time.

Drugs and Medicines
of good quality, at retail, to be had at all times.

DR. WILLIAM LINDSEY

After complimenting his friends for past favors, especially informs the public, generally, that he now considers himself permanently located in the town of Richmond, Indiana. In the practice of his profession, in the various branches of Physic, Surgery, and Midwifery. He may at all times be found at his residence and Drug Store, when not absent on business, one door south of Samuel W. Smith's corner, and one door north of Achilles William's saddler shop.

He still keeps on hand a general assort of

DRUGS AND MEDICINES,

including Paints and Dye Stuffs, all of which he offers low for cash.

He has on hands, Dean's Gum Elastic Japan Varnish, for boots, shoes and harness, said to render leather water proof.

Likewise prepared (himself) an oleaginous Blacking, which renders leather water proof. And can with confidence recommend to the public as a preservative of leather, superior to anything of the kind he has yet seen. Tanners, Shoe-makers, Harness-makers and all others who wish to keep their feet *dry*, would do well to call and examine the article.

A few young men who are qualified, will be taken as medical students.

Well, this is substantial evidence that the medical profession has shown some improvement in one hundred years' time.

Charity Flayed.—A secret vexation to many doctors is the free medicinal service they give. It is a thing they are squeamish about discussing in public. Only when one acquires a public position does he occasionally talk. Thus last week Dr. Charles Gordon Heyd, forty-six, Manhattan surgeon, made of his inauguration as president of the New York County Medical Society—important component of the American Medical Association—a megaphone for the old professional grievance.

Annual free medical attendance in the United States, he estimated, amounts to $365,000,000. Doctors need the money, for fewer than one out of five of them ever save enough money to compensate for their education cost ($28,000 average).

To reduce medical charity, President Heyd expressed four thoughts:

(1) A slap at the general public: "The outlay for cosmetics, cigarettes, chewing gum are expenditures that are in no sense necessities and are distinctly in the luxury class. These luxury expenditures total over five and a half times the total cost of all non-governmental health services. The amount spent for tobacco alone is three times as much as that spent for physicians and the American people spend more for candy than they do for doctors."

(2) An insurance recommendation: "We must come to some scheme whereby the cost of the professional attention, or even the hospital, might be spread over a sufficient number of months to enable the patient to liquidate his indebtedness and be a self-respecting, responsible member of the community."

(3) An insistence: "No free clinic should be permitted to operate without reimbursing the attending physicians for their time."

(4) A promise: "If the doctor could be assured of, let us say, a minimal revenue from all the patients that he takes care of, he could well afford to permit a reduction of some percentage of his work."—*Time*, and *Colorado Medicine*.

In an address on the subject, "The Trend of Medical Practice", delivered by Morris Fishbein, editor of the *Journal of the A. M. A.*, at the annual session of the Missouri State Medical Association, May, 1931, Doctor Fishbein, in commenting on the cost of medical care and the necessity for preserving the personal relationship between the physician and the patient, had the following to say: "The development of university practice, group practice, medical centers, contract practice and industrial practice, and similar changes in the nature of medical practice, has been the response to an attempt to decrease the cost of medical care by lowering the cost of the overhead through better distribution. In every scheme that has been developed, the chief fault is the lessening of personal relationship between the physician and the patient. It is human nature for the worker to feel his responsibility to the source of his income. It is safer for the patient if the physician feels that he is responsible primarily to the patient. Any plan that lessens the responsibility of the trained physician to the patient or that denies him the reward of individual effort or superior ability is detrimental to the welfare of the patient.

"There is no evidence that any of the plans adopted abroad, including compulsory health insurance, the panel system, socialized medicine, communistic medicine or state medicine, has successfully answered the problem in any nation. Such methods represent standardization with the glorification of mediocrity. When an attempt is made to reduce professional service to any level, that is usually a low level.

"The American people spend a half billion dollars a year for cosmetics, two billion for cigarets, and incredible sums for amusements. They have apparently sufficient money to provide for the best type of medical care. With the genius for organization possessed by the American people, some scheme will, no doubt, be evolved for providing them with the best type of medical care at a price that they can afford to pay when they become willing to pay what they really can for such service. Whatever scheme is developed, however, the personal relationship between the physician and the patient must be preserved."

When Dr. Olin West was re-elected secretary and general manager of the American Medical Association at the Philadelphia session he departed from his usual custom and made a speech, a digest of which we believe is worth reproducing for it reflects an opinion that could be applied to some of our county and state medical organizations. Doctor West said in part: "I desire to say just one word about the services of those men who in my opinion make the American Medical Association the efficient organization that it is so far as its efficiency goes. Those are the men who devote themselves to its service in the most unselfish and the most uncomplaining and the most efficient manner as members of its elected and appointed official body. These include the members of this House of Delegates, the officers, and the members of every Council and Committee of the American Medical Association. The American Medical Association never has been and never will be a one-man affair. Its strength has been increased through the effort, the labor, the devotion and service of the men who serve on its official body. There seems to have gotten abroad the impression that there are only one or two men who do much work, but I want this House of Delegates to know, and I would like the world to know, that so far as my knowledge goes, there is no official body of the American Medical Association that ever has failed in a call to service or which ever has neglected any duty that has been imposed on it. From this House of Delegates down to the smallest committee, the work of those who compose these bodies has been characterized by the most earnest effort and by the most unselfish devotion, and therein, my friends, lies the strength of the American Medical Association. One other word I would like to say to you, that if you believe that only one or two men are connected with the Association's work, we want you to come to the headquarters building at 535 North Dearborn Street, Chicago, and see five hundred of the most industrious and earnestly interested employees to be found anywhere. We would like for all of you and for any fellow member of this Association to come there and get thoroughly familiar with the character and scope of the work that is done in that building. We would like for you to see that of the entire five hundred, from the printer's devil to the top, everybody works with a single purpose —to promote the art and science of medicine, the interest of its practitioners, and the interests of the public whom we serve."

Such a speech, with slight modifications, might well be delivered before any state medical association of this country that really is doing things to uphold the dignity and traditions of the medical profession, to further the advance of scientific medicine, to help promote health and educate the public concerning disease prevention, and last but not least improve economic conditions for the individual medical man.

DEATH NOTES

LEWIS GALEN SPRADLEY, M.D., of Boonville, died July 5th, aged sixty years. Doctor Spradley graduated from the Louisville Medical College in 1893.

FRANCIS BROWNE, M.D., of LaFontaine, died July 7th, aged sixty-nine years. Doctor Browne graduated from the Medical College of Indiana, Indianapolis, in 1903.

HOWARD O. SHAFER, M.D., of Rochester, died July 24th, aged fifty-one years. Doctor Shafer had been ill for several years. He was head of the Woodlawn Hospital at Rochester, and served as chairman of the Section on Surgery of the



HOWARD O. SHAFER, M.D.

Indiana State Medical Association in 1925. He graduated from the University of Illinois College of Medicine, Chicago, in 1902, and was a member of the Illinois State Medical Society, the Fulton County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association and the American College of Surgeons.

C. E. AMERMAN, M.D., of Linton, died June 28th, aged sixty-eight years. Doctor Amerman graduated from the College of Physicians and Surgeons, Keokuk, Iowa, in 1887.

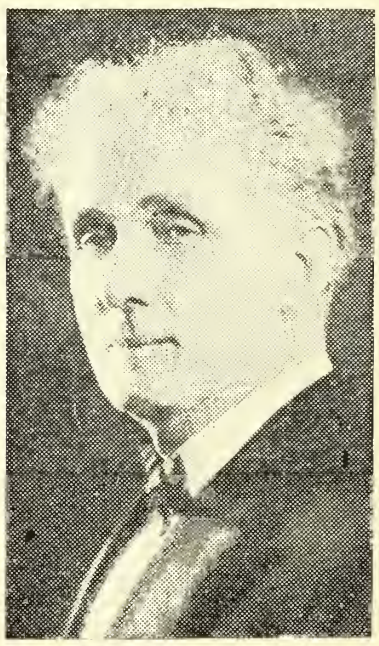
H. I. JONES, M.D., of Indianapolis, died July 7th, following an illness of many years. Doctor Jones graduated from the Medical College of Indiana, Indianapolis, in 1893. He served as captain in the 158th infantry, Indiana Volunteers, during the Spanish-American War.

CHARLES C. WERT, M.D., of Covington, died June 21st, following an illness of several months. Doctor Wert graduated from the Medical College of Indiana, Indianapolis, in 1891. He was a member of the Fountain-Warren County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

JACOB V. BAKER, M.D., of Edinburg, died July 8th, aged fifty-three years. Doctor Baker was a member of the Johnson County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Hospital College of Medicine, Louisville, in 1898.

CHARLES L. CABALZER, M.D., of Indianapolis, died July 26th, aged forty-nine years. Doctor Cabalzer was widely known as a physician and surgeon and was assistant professor of surgery in the Indiana University School of Medicine at Indianapolis. He was a lieutenant in the officers medical reserve corps, and was a member of the Indianapolis Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association and a member of the Associated Anesthetists of the United States and Canada. He graduated from the Indiana University School of Medicine, Indianapolis, in 1908.

DAVID ROSS, M.D., of Indianapolis, died August 3rd, following an illness of several weeks.



DAVID ROSS, M.D.

Dr. Ross was born in Indianapolis, November 20, 1865. He received his B.S. degree from the Central Normal College, Danville, Indiana, in 1891, and soon thereafter took up the study of medicine at the Medical College of Indiana from which he graduated in 1895. Following his internship at the Indianapolis City Hospital Dr. Ross began the practice of medicine in Indianapolis

and since that time has practiced continuously in that city.

Dr. Ross was an instructor in the Medical College of Indiana, and its successor, the Indiana University School of Medicine, in which he held the chair of Associate Professor of Surgery at the time of his death. He served as president of the Indianapolis Medical Society in 1915, and as president of the Indiana State Medical Association in 1920-21. He was active in medical society work and church work, and at the time of his death was chairman of the Executive Committee of the Indiana State Medical Association. He was one of the four delegates from Indiana to the American Medical Association.

Dr. Ross was a member of the Indianapolis Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association and of the American College of Surgeons. He also held memberships in the Rotary Club of Indianapolis and the Indianapolis Athletic Club.

Indianapolis and the state of Indiana will mourn the passing of this prominent surgeon and esteemed citizen.

NEWS NOTES AND PERSONALS

Miss Mae Lybrand and Dr. Tyler Stroup, both of Indianapolis, were married July 1st.

The Noble County Medical Society held a social meeting at Wolf Lake, June 29th.

Dr. B. E. Lemmon has moved from Bloomington to Spencer, where he will practice medicine.

Dr. E. M. Schellhouse, of Fort Wayne, has moved to Lagrange, where he will practice medicine.

Dr. Louis H. Segar, of Indianapolis, was the speaker at the July 22nd meeting of the Grant County Medical Society.

Park Huffman, M.D., has announced the opening of his office in South Whitley for the general practice of medicine and surgery.

The Hendricks County Medical Society met at North Salem, June 18th. Dr. H. H. Wheeler, of Indianapolis, was the principal speaker.

Dr. M. F. Steele has resigned as superintendent of the Methodist Hospital of Fort Wayne. He will specialize in x-ray diagnosis and treatment.

The Carroll County Medical Society met at Delphi, July 10th. Dr. F. E. Jackson, of Indianapolis, presented a paper on "Some Accidents in Obstetrics."

The July meeting of the Daviess-Martin County Medical Society was held at Washington, July 14th. Dr. H. C. Wadsworth presented a paper on "Diphtheria."

Dr. H. G. Erwin, of Lagrange, has purchased the hospital and office equipment of Dr. A. J. Hostetler, who has given up his practice because of failing health.

A congress for studies on population of foreign countries, to discuss some problems related to the diminution of the birth rate, will meet at Rome, September 7th to 10th.

Miss Margaret O'Neil, of Indianapolis, and Dr. Clyde Culbertson, of Vevay, were married June 27th at Indianapolis, where Dr. Culbertson is connected with the Methodist Hospital staff.

Robert W. Wilkins, M.D., formerly of Ann Arbor, Michigan, has announced the opening of offices at 2902 Fairfield Avenue, Fort Wayne. His practice will be limited to obstetrics and gynecology.

The July 28th meeting of the Indianapolis Medical Society was held at the Methodist Hospital Nurses' Home Auditorium, and was a memorial to Dr. Albert E. Sterne and Dr. Charles L. Cabalzer.

Dr. Charles H. Mayo, of Rochester, was made president of the American Surgical Association at its convention in San Francisco recently. New Haven, Connecticut, was selected as the 1932 meeting place.

A campaign for the prevention of smallpox, diphtheria and typhoid fever was started in Orange county, July 6th, sponsored by the Orange County Medical Society, with the cooperation of the county nurse and other county organizations.

The members of the Gibson County Medical Society met at Princeton, July 13th. Dr. W. W. Hewins, of Evansville, presented a paper, his subject being "The Urologist in the Abdomen." The lecture was illustrated with lantern slides.

Dr. A. C. Arnett, of Lafayette, and his son, Richard Arnett, were hosts to Wiley Post and entertained at dinner at the Columbia Club in Indianapolis, July 14th, in honor of Wiley Post and Harold Gatty, globe-encircling aviators.

At the June 18th meeting of the Laporte County Medical Society, held at the Spaulding Hotel, Michigan City, Drs. Haseltine, Ashby, LaForge, of Chicago, and Dr. Myers, of Ann Arbor, presented a symposium on "Asthma."

The American Congress of Physical Therapy will hold its tenth annual meeting at the Hotel

Fontenelle, Omaha, Nebraska, October 5th to 8th, 1931. Preliminary program and other information may be obtained from the American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago, Illinois.

DR. ROBERT B. COFIELD, of the University of Cincinnati Medical School, presented a lantern slide demonstration of bone tumors, with comments as to diagnosis and treatment, at the June 18th meeting of the Wayne-Union County Medical Society. This was a dinner meeting held at the Forest Hills Country Club, Richmond.

THE American Board of Otolaryngology will hold its examination in Indianapolis, September 12th, preceding the meeting of the American Academy of Ophthalmology and Otolaryngology at French Lick, September 14th to 19th. Prospective applicants for certificate should address the secretary, Dr. W. P. Wherry, 1500 Medical Arts Building, Omaha, Nebraska, for application blanks.

THE *Journal of the A. M. A.* (July 18, 1931) says that hospitals in Danville, Virginia, and Greensboro, North Carolina, have reported a new method by which several physicians have been robbed. At Danville a man presented himself at a hospital, asked what physician was operating, then said he was a physician himself and an intimate friend of the doctor named, whereupon attendants showed him to the dressing room near the operating room. After ransacking the doctor's clothing he disappeared.

THE Academy of Medicine of Lima and Allen County (Ohio) will hold its annual postgraduate course of lectures September 8th to 12th, inclusive, in the Steiner Building, at Lima, Ohio. The speaker for the series of lectures will be Thomas McCrae, M.D., professor of medicine in the Jefferson Medical College, Philadelphia. The fee for the series of lectures will be $10; single tickets, $1.50. Complete information and tickets may be obtained from the secretary, Edward B. Pedlow, M.D., 410 Steiner Building, Lima, Ohio.

ACCORDING to announcements by the U. S. Department of Agriculture, Indiana has joined the honor roll of states practically free from bovine tuberculosis. On July 1st, the Department of Agriculture officially designated the entire state as a modified accredited area. This is the fourth state in which tuberculosis among cattle has been reduced to one-half of one percent or less, the others being North Carolina, Maine and Michigan. The achievement in Indiana required the testing of approximately 3,000,000 cattle, from which about 30,000 reactors were removed.

THE United States Civil Service Commission announces open competitive examination for physician (cancer), applications for which position must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than September 4, 1931. The examination is to fill a vacancy in the Veterans' Administration, for duty at Hines, Illinois. The entrance salary is $3,800 a year. Competitors will be rated on their education, training, and experience. Applicants must have been graduated from a Grade-A medical school within twenty years of the date of the close of receipt of applications, and must have had at least three years of postgraduate experience in the practice of medicine, including at least one year in the diagnosis and treatment of malignant diseases, involving the use of radium and radium emanation, the histopathology of tumors, and clinical or laboratory research. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

THE Indiana Tuberculosis Association again offers short courses in tuberculosis to the physicians of Indiana, and in order to make it possible for physicians to attend these courses without much loss of time, several sanatoria of the state will be used as teaching centers for the physicians in the vicinity. Anyone wishing to attend the course may select any place preferred. Two days will be devoted to the work. The purpose of the course is to acquaint the physicians with recent progress in the treatment of tuberculosis. Courses will be given at the following institutions on the dates indicated: William Ross Sanatorium, Lafayette, September 1st and 2nd; Lake County Tuberculosis Sanatorium, Crown Point, September 15th and 16th; Healthwin Sanatorium, South Bend, September 29th and 30th; Boehne Tuberculosis Hospital, Evansville, October 5th to 9th; Irene Byron Sanatorium, Fort Wayne, October 6th and 7th; Sunnyside Sanatorium, Oaklandon, October 8th and 9th; State Sanatorium, Rockville, October 13th and 14th.

Work at the Boehne Tuberculosis Hospital will be in the nature of ward rounds entirely, the class to be divided into groups and each group to have one day. Those applying for the work at this hospital will be notified on which day to appear.

There will be no fee for the course, which is being presented as an aid to the medical profession.

Other information and application blanks may be obtained by writing to the Indiana Tuberculosis Association, 1220 Meyer-Kiser Bank Building, Indianapolis.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Carel Laboratories:

Alpha-Naphco Camphor Nasal Unguent.

Alpha-Naphco Cones.

Alpha-Naphco Menthol Suppositories.

Alpha-Naphco Rectal Suppositories.
Alpha-Naphco Zinc Stearate Camphor Ointment
Alpha-Naphco Zinc Stearate Powder.
Alpha-Naphthol Camphor Oil.
Lederle Laboratories, Inc.:
Liver Extract-Lederle.

INDIANA UNIVERSITY NEWS NOTES

Dr. Robert J. Collins, who was graduated from the Indiana University School of Dentistry this year, has formed a partnership with his father, Dr. O. W. Collins, in Tipton.

Dr. Harold E. Ropp, who was graduated from the Indiana University School of Medicine in 1930, has located in New Harmony. He recently completed his internship in a Toledo hospital.

Dr. Daniel C. Barrett, honor student in the 1930 graduating class of the Indiana University School of Medicine, has been appointed resident physician of the Great Bethesda Hospital in Cincinnati.

Dr. Maurice J. Barry, graduate of the Indiana University School of Medicine in 1908, has been appointed a member of the Board of Public Health of Indianapolis. He was formerly vice-president of the Indianapolis Medical Society.

Dr. Samuel Snodgrass, graduate of the Indiana University School of Medicine, will do special work at the Lakeside Hospital, Cleveland, Ohio, next year. For the past year Doctor Snodgrass has been chief resident pathologist for the Indiana University Hospitals, Indianapolis.

A bequest of $2,500 in cash under terms of the will of the late Charles S. Stone, of Indianapolis, was announced here recently by Pres. William Lowe Bryan, of Indiana University. The fund goes to the Robert W. Long Hospital at the Indiana University Medical Center, Indianapolis. The fund will be used, along with an additional $2,500 by anonymous donors, for the purchase of a supply of radium to be used at the Robert W. Long and the other University hospitals. The radium will be known as the "Charles S. Stone Supply of Radium". The additional $2,500 was given by friends of Mr. Stone when they learned the purpose for which his gift was to be used.

Internships in thirty-one hospitals in Indiana and eleven other states, in addition to one in Canada and one in British West Africa, have been granted to ninety-five members of this year's graduating class of the Indiana University School of Medicine. The remaining seven members of this year's class have not as yet decided where they will be located.

Sixty-four of the young I. U. doctors will serve their internships in Indiana hospitals. Other states represented in the internship list are Louisiana, California, Ohio, Pennsylvania, Washington, Missouri, Michigan, Illinois, Florida, Maryland, and Massachusetts. The Indiana University Hospitals, including the Robert W. Long Hospital, the James Whitcomb Riley Hospital for Children, and the William H. Coleman Hospital for Women, will receive fifteen of the new doctors. The City Hospital of Indianapolis will have the largest number of this year's I. U. medical school graduates. Twenty-four of the I. U. doctors will be located in this hospital. St. Vincent's Hospital, Indianapolis, will have seven, and the Methodist Hospital, Indianapolis, six.

Other Indiana hospitals where I. U. graduates of this year's class will serve their internships and the number to be in each are as follows: St. Catherine's Hospital, East Chicago, four; Epworth Hospital, South Bend, three; St. Elizabeth's Hospital, Lafayette, two; Fort Wayne Methodist Hospital, one; St. Joseph's Hospital, Fort Wayne, one; St. Joseph's Hospital, South Bend, one.

Hospitals outside the state where more than one I. U. intern will be located next year are as follows: U. S. Public Health Department, New Orleans, Louisiana; U. S. Army Letterman Hospital, San Francisco, California; Lucas County Hospital, Toledo, Ohio; St. Elizabeth's Hospital, Dayton, Ohio; Santa Barbara Cottage Hospital, Santa Barbara, California; Mercy Hospital, Altoona, Pennsylvania, and Kansas City General Hospital, Kansas City, Missouri.

The complete list is as follows:

Indianapolis City Hospital: Francis T. Brown, Indianapolis; Matthew Cornacchione, Indianapolis; Harry M. Covell, Angola; Chris W. Cullnane, Evansville; Donald I. Dean, Rushville; Frank F. Furstenberg, Indianapolis; Dillon Geiger, Bloomington; Jacob E. Gillespie, Wabash; Gayle J. Hunt, Richmond; George L. Jones, Indianapolis; Leo E. Jordan, Indianapolis; Bennett Kraft, Indianapolis; Emmett B. Lamb, Amboy; Jean R. LaVanchy, Indianapolis; Calvin P. McLaughlin, Indianapolis; Vincent J. Noone, Indianapolis; Carl M. Porter, Linton; Donald Reed, Culver; Maurice Rothberg, Fort Wayne; Martin Ruth, Indianapolis; George L. Sandy, Martinsville; Russell J. Spivey, Thorntown; William J. Stangle, Monticello; Everett C. Taylor, Lafontaine.

Indiana University Hospitals: William E. Barnett, Logansport; Robert M. Brown, Marion; Fred O. Clark, Terre Haute; William D. Davidson, Evansville; Keith Hepburn, Bloomington; Olga A. Hoffman, Indianapolis; Lawrence M. Hughes, Indianapolis; Wilbur J. Irish, East Chicago; Clifford J. Lewis, Valparaiso; Ernest McDonald, Indianapolis; John F. Mills, Wabash; Arthur B. Richter, Flora; James Schutt, Ligonier; Carl B. Southard, Noblesville; Gerald S. Young, Huntington.

St. Vincent's Hospital, Indianapolis: Robert J. Bickel, Fort Wayne; Anton P. Hattendorf, Fort Wayne; Marvin E. Hawes, Indianapolis; Glenn C. Lord, Kewanna; John F. Parker, Terre Haute; Harry M. Steen, Bloomington; Glen Musselman, Indianapolis.

Methodist Hospital, Indianapolis: Fred D. Cheney, Indianapolis; Clarence G. Kern, Lebanon; Paul Nelson, Anderson; William Robertson, Salem; Alvin D. Schaaf, Bloomington; John A. Schram, Bloomington.

St. Catherine's Hospital, East Chicago: Owen F. Benz, Milltown; Clarence W. Brown, LaPorte; Ardis F. Melloh, Indianapolis; Comiel Malstaff, Walkerton.

U. S. Public Health Department, New Orleans, Louisiana: Donald C. Emenhiser, New Haven; John K. Folck, Angola; John W. Oliphant, Fort Branch.

Epworth Hospital, South Bend: John E. Luzadder, Bloomington; Edward S. Post, South Bend; Leonard McMurtry, Indianapolis.

U. S. Army, Letterman Hospital, San Francisco: Winship C. Callaghan, New Albany; William M. Nichol, Oakland City.

Lucas County Hospital, Toledo, Ohio: Walter F. Galbreath, Huntington; George Hazel, Logansport.

St. Elizabeth's Hospital, Lafayette: George W. Herrold, Lafayette; Virgil Scheurich, Avilla.

St. Elizabeth's Hospital, Dayton, Ohio: Harold Hilty, East Chicago; William M. McLin, Bicknell.

Santa Barbara Cottage Hospital, Santa Barbara, California: Lee Streaker, Salem; John C. Volderauer, Evansville.

Mercy Hospital, Altoona, Pennsylvania: Margaret F. Benjamin, Thiells, New York; Anna Goss, Henryville.

Hospital in Nigeria, British West Africa: Howard Bosler, Huntertown.

Tacoma General Hospital, Tacoma, Washington: Charles H. Denzler, Jeffersonville.

Miami Valley Hospital, Dayton, Ohio: August J. Dian, Gary.

Jewish Hospital, St. Louis, Missouri: Herbert S. Dieckmann, Evansville.

San Diego County General Hospital, San Diego, California: Samuel J. Ferrara, Gary.

Grace Hospital, Detroit, Michigan: Orville A. Hall, Indianapolis.

Cleveland City Hospital, Cleveland, Ohio: Nicholas E. Keseric, Gary.

Kansas City General Hospital, Kansas City, Missouri: Robert M. LaSalle, Wabash; Lionel Maloney, Indianapolis.

Springfield City Hospital, Springfield, Ohio: John P. Marsh, Wilkinson.

Montreal General Hospital, Montreal, Canada: Maynard Poland, Indianapolis.

Akron City Hospital, Akron, Ohio: Alden J. Rarick, Cromwell.

Fort Wayne Methodist Hospital, Fort Wayne: James Rohrer, Leesburg.

St. Mary's Hospital, East St. Louis, Illinois: Sam Rotman, Jasonville.

St. Joseph's Hospital, South Bend: Carl Rudolph, Lakewood, Ohio.

U. S. Public Health Service, Chicago: Byron J. Smith, Yeddo.

St. Joseph's Hospital, Fort Wayne: Arthur Steffen, Huntington.

James M. Jackson Memorial Hospital, Miami, Florida: Karl Vetter, Elkhart.

Detroit Receiving Hospital, Detroit, Michigan: Paul C. Vietzke, Indianapolis.

Provident Hospital, Baltimore, Maryland: Marion Wilson, Indianapolis.

U. S. Navy Hospital, Boston, Massachusetts: Donald O. Wissinger.

SOCIETY PROCEEDINGS

THE INDIANAPOLIS SESSION

The eighty-second annual session of the Indiana State Medical Association will be held at Indianapolis, September 23, 24 and 25, 1931. Official headquarters will be at the Claypool Hotel, where the commercial and scientific exhibits also will be held.

Golfers will be guests of Eli Lilly & Company both for tournament play and luncheon. Golf tournament and luncheon will be held at the Broadmoor Country Club, Wednesday morning, September 23rd.

The Council will hold its usual luncheon meeting on Wednesday, September 23rd, in a private dining-room of the Claypool Hotel, on the mezzanine floor.

General scientific meetings will be held Thursday morning, Thursday afternoon and Friday morning. This year there will be no scientific program for the various sections. Short business meetings and election of officers for all sections will be held immediately after the final general scientific meeting convenes Friday.

The House of Delegates will hold its first meeting in the Riley Room, mezzanine floor, Claypool Hotel, Wednesday morning.

Women physicians will hold a dinner meeting Wednesday at 6:00 p. m.

The Woman's Auxiliary will hold a breakfast and business meeting Thursday, September 24th. The State Executive Board will meet Wednesday, September 23rd, at the Claypool Hotel.

Details of the special entertainments will be given in the September issue. Visiting women will be well entertained. There will be fraternity and class luncheons, and a luncheon for World War veterans. The usual annual banquet for physicians, wives, and guests will be held at the Riley Room, mezzanine floor, Claypool Hotel, Thursday, at 7:30 p. m.

The program committee announces the following papers:

"Peroral Endoscopy as an Aid to Diagnosis", by D. O. Kearby, M.D., Indianapolis.

"Non-Tuberculous Infections of the Lungs", by Paul D. Crimm, M.D., Evansville.

"Prenatal Care from an Endocrine Standpoint and Its Effects on the Growth and Final Development of the Baby", By B. M. Taylor, M.D., Portland.

"Treatment of Common Skin Diseases", by G. B. Underwood, M.D., Evansville.

"Uterine Bleeding, The Cause, with Special Reference to Malignancies and Their Treatment", by O. R. Spigler, M.D., Terre Haute.

"Delivery Technic in the Home", by W. L. Portteus, M.D., Franklin.

"Critical Review of Hypertension", by B. S. Cornell, M.D., Fort Wayne.

"Surgery of the Future", by H. H. Martin, M.D., Laporte.

"Etiology and Operative Treatment of Squint", by H. L. Stanton, M.D., Evansville.

Symposium—Gastro-intestinal Diseases:

Medical Phase—R. L. Sensenich, M.D., South Bend.

Surgical Phase—Harold D. Caylor, M.D., Bluffton; Truman E. Caylor, M.D., Bluffton.

General Phase—H. O. Bruggeman, M.D., Fort Wayne

"Present Status of Burn Therapy", by C. C. Robinson, M.D., Indiana Harbor.

"Some Urological Problems", by Ernest O. Nay, M.D., Terre Haute.

"Traumatic Spine", by P. D. Moore, M.D., Muncie.

This program, of course, is subject to changes before the time of the session. The complete program will be published in the September issue. Indianapolis promises a session well worth the time of every physician in Indiana to attend.

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

June 23, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held June 1*th read and approved.

Newspaper, release, "Lockjaw Weeks," read and approved for publication July 1st.

Radio release, Saturday, June 20th—"Infant Care in Warm Weather."

Report on medical meeting:

June 4th—Fountain-Warren County Medical Society, Covington, Indiana, "Malaria Therapy of Paresis."

Request for speaker:

June 26th—Indiana Democratic Editorial Association, Gary, Indiana. Subject: "The Ethics of Medical Advertising." Speaker assigned. Outline of talk reviewed by Bureau.

Letter received from dean of the Indiana University School of Medicine at Bloomington.

The comment in the *American Medical Association Journal* of June 20th on report of the Indiana legislative activities was reviewed by the Bureau. The comment follows:

"Many of the states show by their reports evidence of great interest in this subject (legislation) and have made suggestions that require special comment. There were some excellent reports, and I would like to mention particularly the report of the secretary of the Indiana State Medical Association. He gave us in great detail their methods of organization and of cooperation with the Bureau of Legal Medicine and Legislation. They maintain close contact with members of Congress, have a strong tie-up with newspapers by a newspaper man who handles publicity, and keep in close contact with Dr. Woodward."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 1, 1931.

July 1, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held June 16th read and approved.

Newspaper release, "Chiggers," read and approved for publication on July 13th.

Radio release, Saturday, June 27th—"Lockjaw Weeks."

Radio release approved for broadcast July 4th—"Medical Patriots."

Reports on medical meetings:

June 4th—Hancock County Medical Society, Fortville, Indiana: "Pain as a Factor in Heart Disease."

June 26th—Indiana Democratic Editorial Association, Gary, Indiana: "The Ethics of Medical Advertising."

Letter received from National Food Bureau in regard to Food Fads.

Program of Winona Lake Child Health Institute received from the director of the Division of Infant and Child Hygiene of the State Board of Health.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 7, 1931.

INDIANA STATE BOARD OF HEALTH
DIVISION OF COMMUNICABLE DISEASES

Monthly Report, July, 1931

Morbidity reports were received from all the counties in the state except Newton, Pike and Warrick. These counties did not report either positive or negative; 1,264 cases of diseases reported during the month. Last month 8,008 cases were reported; 546 negative report cards received. The summary of current prevalence of communicable diseases is shown as follows:

Diseases	*Total*	*Urban*	*Rural*
Tuberculosis	229	135	94
Chickenpox	42	37	5
Measles	274	183	91
Scarlet fever	116	69	47
Smallpox	159	85	74
Typhoid fever	23	9	14
Whooping cough	337	283	54
Diphtheria	45	26	19
Influenza	5	0	5
Pneumonia	5	1	4
Mumps	14	11	3
Meningococcus meningitis	14	10	4
Septic sore throat	1	0	1
Grand total	1,264	849	415

The general trend for the month shows a marked decline, except typhoid fever and whooping cough, which are normal for the season.

Typhoid fever. The disease is on the increase—twelve cases the previous month. Corresponding month the preceding year thirty-two cases were reported. Sixty-six cases was the average for the last seven years and the average for the last four years was only sixteen cases. The yearly average percent of reported cases for Indiana is only fifty-two percent. We are sorry to make this confession, but it is true. It is to be hoped that every health officer in the state will read this report.

Whooping cough is the most prevalent disease reported this month; 265 cases last month. The corresponding month the previous year, 147 cases. The estimated expectancy was 298 cases. The estimate is based on the experience of the last seven years. The mortality rate of the disease is higher than scarlet fever and measles. The morbidity reported rate for Indiana is only thirty-eight percent. The great majority of cases are not under the physician's care.

Scarlet fever and measles show a marked decline over the previous month, scarlet fever 354 cases, and measles 1,354 cases. The prevalence of the two diseases is characteristic for the season. They are cold weather diseases.

Smallpox. For smallpox the comparison with last month is favorable, 350 cases reported; 275 cases in July last year. There will be a lower level as the season advances.

Diphtheria. The low level of diphtheria in relation to recent months is also favorable. The number of cases reported last month was 105. However, a low seasonal

level is shown—34 cases in July of last year. The expectancy for July over the seven-year period is 58 cases. The disease will not increase much until late autumn. Diphtheria, like many of the communicable diseases, is a house disease.

Epidemic Cerebro-spinal Meningitis. Seventeen cases were reported last month; the corresponding month the previous year, fifteen cases. In July of 1929 and 1928, three cases and two cases were reported, respectively. There is a low level this time of the year. The fourteen cases reported for the current month were: from Marion, six cases; Monroe, three, and one case each from Allen, Lake, Perry, St. Joseph and Vigo counties.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

INDIANA VENEREAL DISEASE CLINICS

Number of cases never previously admitted	324
Total number of old cases and readmissions under treatment during month	5,816
Number of cases discharged as arrested or cured during month	242
Number of cases discontinued treatment without permission	312
Total number of cases remaining under treatment during month	5,586
Number of male syphilitic cases remaining under treatment during month	2,760
Number of female syphilitic cases remaining under treatment during month	1,788
Total number of syphilitic cases remaining under treatment during month	4,548
Total number of treatments during month	11,634
Total number of visits to clinic for treatment, examination or advice	15,259

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	120
Gonorrhea	40
Chancroid	0

During the month one thousand four hundred ninety-one pamphlets were distributed. Five hundred seventy-one were mailed upon receipt of thirteen requests and nine hundred twenty were sent to five people on our own initiative.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society held its annual Family Dinner Dance at the South Bend Country Club, May 20, 1931, with golf at 1:00 p. m. and dinner at 7:00 p. m., followed by bridge and dancing. Thirty-eight members and two guests, with their wives, were present, making eighty in attendance.

Prizes for golf were as follows: First, two golf balls to Doctor Hart, with a score of 175; booby, one golf ball to Doctor Fish, with a score of 80. Six other prizes were drawn for as follows: Doctor Duggan, 120, shoes; Doctor Hilbert, 119, six golf balls; Doctor Baker, 89, six golf balls; Doctor Crow, 117, three golf balls; Dr. Harry Sandoz, 113, three golf balls; Doctor Harman, three golf balls.

The committee, Doctors Blackburn, Savery, and Sandock, are to be congratulated for arranging a most delightful meeting.

The last regular meeting of the St. Joseph County Medical Society until September was held at Healthwin Hospital, Wednesday, May 27, 1931, when the members of the society were dinner guests of the hospital with Doctors Darden and Wilson as host and hostess. Before dinner the new ward of the hospital with all its modern improvements was inspected. After a delicious dinner of fried chicken a short business meeting was held. Dr. John D. Skow was unanimously elected to membership in the society. Doctor Darden gave a most interesting talk and showed many x-ray plates of the lungs of patients before and after phrenic nerve operations.

About seventy-five members were present.

The meeting adjourned about 9:30 p. m. until September.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

FORT WAYNE MEDICAL SOCIETY

The Fort Wayne Medical Society held its annual election meeting June 16, 1931, at 8:30 p. m. in the Wayne Pharmacal Building. By unanimous vote each of the following men were elected:

President—Dr. B. M. Edlavitch.
Vice-president—Dr. A. L. Mikesell.
Secretary—Dr. L. P. Harshman.
Treasurer—Dr. M. F. Steele.

Delegate for Two Years—Dr. S. P. Hoffman, with Dr. W. W. Duemling as alternate.

To fill out the unexpired term of Dr. L. B. Schneider, deceased—Dr. A. L. Schneider.

Censor—Dr. C. A. Savage.

The treasurer gave his report showing $804.30 in the General Fund and $1,337.06 in the Sick Benefit Fund.

The secretary presented his report.

Both reports were approved.

Dr. Duemling moved that the secretary be allowed the usual bonus of $50 plus 50 cents per member. Motion carried.

Dr. D. W. Schafer as chairman of the Health Clinic gave a short discussion of the purposes of this work and a detailed report of the number of cases cared for which details follow: "We have made an attempt to build an organization to take care of the charity medical and surgical work of this community. We feel that we have succeeded inasmuch as there is an organization that is doing the work. It is very crude indeed. It will require many changes over a period of years and will never be perfect. However, this much is true: Each case is properly investigated from every standpoint before acceptance; each case is given better treatment that we as individuals can possibly give; each case is properly followed up and at any time they become rehabilitated financially they may not return to the Health Clinic. Many more things could be said. For instance, we are now opening negotiations with the officials of the township and city to draw up a contract giving the medical society pay for doing this work. These negotiations were opened for the specific reason that everyone is receiving pay for work along this line except the physician. We wish to state here that no physician now under contract will be displaced by our society. We also wish to state that most of the county and township officials are agreeable to paying the physicians. Fifteen county societies in Iowa are now working under such contracts, and such are agreeable to all parties concerned. One of these contracts has been in force for twenty years. A similar contract is in force at Fowler, Indiana, and other counties are now organizing to make such contracts. This plan is advised by the economic department of the A. M. A.

"We have aimed to use every man in the society, but that will require about one year's time. We have aimed to have every man send through his charity work that he might benefit thereby.

"Inasmuch as when we were appointed by the chair we were asked to resign at the termination of that office, we now offer you our resignation.

"In the past seven months 574 patients have been examined at the Fort Wayne Health Clinic. These have been referred by eighteen sources, the largest of which has been the Public School Welfare Worker, who referred

159 children needing some correction of eyes, ears, nose or throat, or for general examination and advice.

"When a patient is referred the Clinic Worker makes a social investigation to learn the financial status which includes income, expenses, indebtedness, source of support, and she also secures the names and addresses of relatives. In addition to this the environmental conditions are noted. In most instances the relatives are not financially able to aid. If the patient or his family is found to be in a financial position to pay for medical care, he is asked to consult his family physician or one of his own choice. If they are financially unable to pay their family physician or one of their own choice the name of the family physisian or physician last attending the family is secured and he is contacted by telephone on emergencies and by letter on regular referrals to determine his approved or disapproval of the patient's attendance in Clinic. The financial condition is checked from month to month and as soon as the financial condition is improved they are asked to return as pay patients to a physician's office for treatment. The industrial depression is still very greatly felt and there have been only a few who have had increased earnings and could be thus referred.

"On May 1st an initial examination charge of 25 cents was instituted and a charge of 10 cents for each follow-up call. This has been fairly successful."

Following a detailed report of clinic cases, Dr. Bulson moved that this committee, especially the chairman, be given a vote of appreciation and thanks by the society for the intensive work which they had done and that the committee which had tendered a resignation be asked to continue this work during the following year. Motion seconded and carried. Dr. Shafer moved that the society send Mrs. Noble and Mrs. Clem of the Hospital Home Service a letter of appreciation for their cooperative efforts. Motion carried.

Dr. VanBuskirk moved that the society go on record as commending the president for his leadership during the past year. Motion seconded and carried.

Motion to adjourn carried. Forty members present.

L. P. Harshman, M.D.,
Secretary.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

VIGO COUNTY

The May meeting of the Vigo County Auxiliary was a dinner meeting held at the Elks Club. There were one hundred people present. The husbands of the members of the Auxiliary were guests.

Following the dinner Mrs. Demarcus Brown, of Indianapolis, gave a most interesting and instructive talk on "Fort Ticonderoga".

DELAWARE-BLACKFORD COUNTY

The woman's Auxiliary of the Delaware-Blackford County Medical Society joined with their husbands at a dinner meeting held at the Roberts Hotel on Tuesday evening, April 21, 1931. After the dinner the women adjourned to another room where a business session was held. The following officers were elected for the ensuing year:

President—Mrs. Howard Hill.
Vice-president—Mrs. C. M. Mix.
Secretary—Mrs. Elmer Cure.
Treasurer—Miss Lola Jackson.

Cards and flinch were enjoyed for the remainder of the evening.

LAWRENCE COUNTY

On May 6th, at the home of Mrs. Robert Smallwood, in Bedford, the doctors' wives of Lawrence County organized an Auxiliary to the Lawrence County Medical Society. Mrs. William S. Tomlin, state president, helped in the organization. Mrs. D. O. Kearby and Mrs. W. E. Tinney were guests also. Eighteen women met for lunch before the business session.

Officers elected were:

President—Mrs. Harold McKnight, 1210 Thirteenth St., Bedford.

Vice-president—Mrs. Harry Ragsdale, 1620 Ninth St., Bedford.

Secretary-Treasurer—Mrs. Robert Smallwood, 1506 Thirteenth St., Bedford.

VANDERBURGH COUNTY

The following is the list of our present officers of the Woman's Auxiliary to the Vanderburgh County Medical Society:

President—Mrs. L. E. Fritsch, 30 W. Franklin St., Evansville.

First Vice-president—Mrs. Wallace Dyer, 1414 Lincoln Ave., Evansville.

Second Vice-president—Mrs. O. C. Stephens, 1208 Parkside Drive, Evansville.

Corresponding Secretary—Mrs. Jess R. Logan, 503 First Ave., Evansville.

Recording Secretary—Mrs. W. C. Caldwell, 643 College Highway, Evansville.

Treasurer—Mrs. Harmon L. Stanton, 701 College Highway, Evansville.

Vanderburgh County Auxiliary has instituted a worthy memorial movement. The Auxiliary assists the Christian Home in some charitable feature in the memory of last year's vice-president, Mrs. McClurkin.

This is a beautiful tribute and also very fine constructive work which might well be followed by other groups.

CORRESPONDENCE

INVESTMENT ADVICE

Indianapolis, July 1, 1931.

Editor The Journal:

It is a little difficult to derive any satisfaction from the present economic depression. However, as a physician the writer proposes in the future to give himself the pleasure of answering certain criticisms of doctors to which he has had to listen all his life. One of the stock arguments which the financial experts in the person of bond and stock salesmen use to sell their wares to physicians is that the doctor is too dumb to know what a safe investment is and he, therefore, must take the bond firm's or the banker's word for it. He had heard this so many times that he finally got to believing it, and had implicit faith in the reputable bond houses as a safe guide to occasional investments. However, the depression has shown that the doctor was not the only dumbbell in the matter of investments.

If the time ever comes again when the writer has any money to invest, which is doubtful, he will not listen in silence to a criticism of physicians in general concerning judgment on financial transactions. The truth is that if our financial experts and money kings had given half the time and energy to a study of some of the fundamental laws that control our economic system that science has devoted to questions of health, these peaks and depressions in our economic career could be leveled off, greatly to our safety as well as profit. When the wise boys of the bond houses learn their business as well as we have ours it will be time for them to tell us what to do with our spare change.

M. N. Hadley.

BOOK REVIEWS

Books received since July 1, 1931:

Cutaneous X-ray and Radium Therapy. By Henry H. Hazen, A.M., M.D., Professor of Dermatology, Medical Department of Georgetown University. 166 pages. Illustrated. Cloth. Price $3.00. The C. V. Mosby Company, St. Louis, 1931.

MODERN PROCTOLOGY. By Marion C. Pruitt, M.D., F.A.C.S., Associate in Surgery, Emory University School of Medicine. 404 pages with 233 illustrations. Cloth. Price $8.00. C. V. Mosby Company, St. Louis, 1931.

BEDSIDE INTERPRETATION OF LABORATORY FINDINGS. By Michael G. Wohl, M.D., Associate Professor of Experimental Medicine, Temple University Medical School. Introduction by Joseph McFarland, M.D., Professor of Pathology, University of Pennsylvania. 321 pages, illustrated. Cloth. Price $6.00. The C. V. Mosby Company, St. Louis, 1931.

MEDICAL JURISPRUDENCE. By Carl Scheffel, Ph.B., M.D., LL.B. 313 pages. Cloth. Price $2.50. P. Blakiston's Son & Company, Inc., Philadelphia, 1931.

THE DOCTOR AND HIS INVESTMENTS. Financial Policy and Technique for the Physician. By Merryle Stanley Rukeyser, B.Lit., M.A., Financial Editor, Medical Economics and Dental Survey, Financial Editorial Writer, New York *American* and Associated Newspapers. 330 pages. Cloth. Price $2.50. P. Blakiston's Son & Company, Inc., Philadelphia, 1931.

FOOD FADS, FACTS AND FALLACIES. By a Philadelphia Physician. Illustrated by A. A. Wallgren. Cloth. 37 pages. Price $1.00. Published by *The Medical Searchlight*, 809 Marlyn Road, Philadelphia, Pa.

AN INTRODUCTION TO GYNECOLOGY. By C. Jeff Miller, M.D., Professor of Gynecology, Tulane University School of Medicine. 327 pages, illustrated. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1931.

CLINICAL DIETETICS. A Textbook for Physicians, Students and Dietitians. By Harry Gauss, M.S., M.D., F.A.C.P., Instructor in Medicine, University of Colorado School of Medicine; assisted by E. V. Gauss, B.A., formerly assistant dietitian, Presbyterian Hospital, Denver. 490 pages. Illustrated. Cloth. Price $8.00. The C. V. Mosby Company, St. Louis, 1931.

BOOK REVIEWS

THE DOCTOR AND HIS INVESTMENTS. Financial Policy and Technique for the Physician. By Merryle Stanley Rukeyser, B.Lit., M.D., Financial and Editorial Writer, New York American and Associated Newspapers, and author of numerous books concerning money and investments. 330 pages. Cloth. Price $2.50. P. Blakiston's Son & Company, Inc., Philadelphia.

This book should be welcomed by any physician, no matter what his circumstances, for it deals exclusively with the financial problems of physicians. It contains a great deal of very useful information concerning the business side of the practice of medicine, and the best way in which the physician can not only make both ends meet but lay aside and invest a portion of his earnings for the benefit of himself or his family. Budgets are prepared and recommendations given as to how, where and when to invest money. It is a very useful book.

THE LONG TREK. Or Around the World with Camera and Rifle. By Richard L. Sutton, M.D., Sc.D., LL.D., F.R.S. (Edin.), Fellow of the Royal Geographical Society; Professor of Dermatology, University of Kansas; and Richard L. Sutton, Jr., A.M., B.Sc., M.D. 347 pages, with more than 200 illustrations from photographs made by the authors. Cloth. Price $5.00. The C. V. Mosby Company, St. Louis, 1930.

This is an exceedingly interesting travel book written by a physician, an experienced traveler, who describes a trip of adventure to Africa. The book describes the preparations for the trip, and goes into detail concerning thrilling adventures and observations concerning wild animals, native people, and an interesting country. Anyone who loves clean sport and adventure will be interested in this travel book. The text is made more interesting by a large number of illustrations.

NEW AND NONOFFICIAL REMEDIES, 1931, containing descriptions of the articles standing accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1931. Cloth. Price, postpaid, $1.50. Pp. 481 + LVI. Chicago: American Medical Association, 1931.

This volume is the annual publication of the Council on Pharmacy and Chemistry of the American Medical Association giving the latest authentic information concerning those of the newer medicinal preparations found worthy of the consideration and use of the medical profession. Each year the Council scans the general articles under which the various preparations are classified and revises these to conform to the latest and best medical thought.

A glance at the preface shows that a number of preparations have been omitted because they conflict with the rules that govern acceptance, because their distributors did not present evidence to demonstrate their continued acceptability, or simply because the manufacturers have taken them off the market. Important revisions have been made in a number of the general articles and in the descriptions of various preparations. Among the new preparations that have been found by the Council during the past year to be eligible for admission to the book are: Amytal and Pulvules Sodium Amytal, 3 grains, barbituric acid derivatives for use preliminary to surgical anesthesia; Thio-Bismol, quinine bismuth iodide, sodium potassium bismuthyl tartrate, and Tartro-Quiniobine, bismuth compounds for use in the treatment of syphilis; Scillaren and Scillaren-B, preparations containing the squill glucosides; two new cod liver oil concentrates; Synephrine, a new vasoconstrictor, and synthetic thyroxine.

This book should be in the hands of all who prescribe drugs. It contains information about the newer materia medica which cannot be found in any other publication.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1930. Cloth. Price, $1.00. Pp. 91. Chicago: American Medical Association, 1931.

This book is essentially a record of the negative actions of the Council on Pharmacy and Chemistry of the American Medical Association; that is, it sets forth the findings concerning medicinal preparations which the Council has voted to be unacceptable for recognition and use by the medical profession. Many of the reports record outright rejection or the rescinding of previous acceptances; others report in a preliminary way on products which appear to have promise but are not yet sufficiently tested or controlled to be ready for general use by the profession.

Among the reports recording outright rejection are those on: Avesan (H), formerly Nuforal, a mixture stated to be composed of formic acid, sodium nucleinate, camphor, allyl sulphide and chlorophyll, with traces of salicin and sulphuric ether, marketed with unwarranted claims of usefulness in the treatment of tuberculosis, asthma, and other respiratory diseases; Ceanothyn, once before rejected and still found to be marketed with unsupported therapeutic claims; Collosol Calcium and Collosol Kaolin, so-called colloidal preparations, the former an unscientific mixture of unproved value, the latter a possibly dangerous preparation, and both marketed with unwarranted claims; Ephedrol with Ethylmorphine Hydrochloride, an unscientific ephedrine preparation marketed under an unacceptable proprietary name with unwarranted therapeutic claims; Farastan, an unscientific iodine-cinchophen preparation proposed for routine use in "arthritis . . . and Rheumatoid conditions"; Haley's M-O Magnesia-Oil, a magnesia magma and liquid petrolatum mixture in fixed proportions marketed with emphasis on the "M-O"; Lydin, a testicular extract, marketed with claims of value in the treatment of impotence; and Metatone, a shot-gun "tonic" mixture marketed under a proprietary name with unwarranted therapeutic claims.

Food Fads, Facts and Fallacies. By a Philadelphia Physician. Illustrated by A. A. Wallgren. Paper volume, 38 pages. Price $1.00. The Medical Searchlight, Philadelphia, Pa., publishers, 1931.

This is a satirical discussion of food fads, illustrated by Wally, the well-known caricaturist. It exposes the fallacies of the food faddists who are exploiting the sick as well as those who believe themselves to be in good health. It exposes the fallaciousness of the arguments put forth by those who advocate a variety of diets recommended without rhyme or reason.

The Socialization of Medicine. The Reference Shelf, Volume VII, Number 1. Compiled by Edith M. Phelps. 190 pages. Cloth. Price $ .90. The H. W. Wilson Company, publishers, New York, 1930.

In reality this is a compilation of articles and abstracts discussing the pros and cons of state medicine. It is evident that the compiler favors state medicine even though she quotes those who are opposed to it. At all events there is a brief discussion of both sides of the question, though we notice that most of the arguments for state medicine are by laymen and there is a decided rejection of any idea that physicians should have any voice in deciding what is to their own interets as well as the interest of the public.

Clinical Allergy. Particularly Asthma and Hay Fever. By Francis M. Rackemann, M.D., Physician to the Massachusetts General Hospital, and Instructor in Medicine, Harvard Medical School. 617 pages. Cloth. Price $10.50. The Macmillan Company, New York, 1931.

Heretofore books on immunology and a discussion of allergic manifestations have been so technical as to be of little practical importance to the general practitioner of medicine. Much that has been written concerning immunology has been based upon animal experimentation and the author very appropriately says that animal experimentation has distinct limitations and hyper sensitiveness of man must be studied both practically and theoretically in the clinic. Fortunately he has had the cooperation of those working with him in the anaphylaxis clinic at the Massachusetts General Hospital, and it is a study of the clinical aspects of cases and the treatment used which forms a basis for far more intelligent opinion than otherwise would be possible, and as a commenter has well said, this book should be of the utmost importance in bringing the immunological point of view to the clinician and the clinical point of view to the immunologist. In fact we are of the opinion that this book is the first one to discuss the subject from a practical standpoint and give trustworthy opinions of value to every clinician. Aside from a discussion of the observations and results of work in the clinics the author gives a digest of the literature on the subject. Of especial interest is the author's splendid attempt to define the present-day conception of the mechanism of asthma, hay fever and allied disorders, and then to discuss the methods of diagnosis and treatment with the results obtained.

Piersol's Human Anatomy. Including Structure and Development and Practical Considerations. Ninth edition revised under the supervision of G. Carl Huber, M.D., Sc.D., Professor of Anatomy, Director of Anatomic Laboratories and Dean of the Graduate School, University of Michigan. 1734 illustrations, 22 original and 460 in color. 2104 pages. Cloth. Price $10.00. J. B. Lippincott Company, Philadelphia and London, 1930.

It seems superfluous to find a word of appreciation and approval of a book now in its ninth edition and which has received such universal acceptance among teachers and students. From the first the author has had in mind and carried out three chief considerations: first, the presentation of the essential facts of human anatomy regarded in its broadest sense by descriptive text which while concise should be sufficiently comprehensive to include all that is necessary for a thorough understanding not only of the gross appearances and relations of the various parts of the human body but also of their structure and development; second, adequate emphasis and explanation of the many and varied relations of anatomical detail to the conditions claiming the attention of the physician and surgeon; third, the elucidation of such text by illustrations that portray actual dissections and preparations with fidelity and realism. The original text has been revised frequently for the purpose of adding to clearness and understanding as well as to incorporate new illustrations and incorporate the newer theories concerning cystogenesis of the blood elements, the development of the lymphatics and the primary veins, the peripheral nervous system and particularly the fibre-paths of the central nervous system. The book is abundantly illustrated, many in color, and it well deserves its extensive popularity.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

Syrup No. 112 Ephedrine Hydrochloride.—It contains ephedrine hydrochloride-Lilly (New and Nonofficial Remedies, 1931, p. 175) 0.22 Gm., in 100 cc. (1 grain per fluidounce) and alcohol, 12 percent. Eli Lilly & Co., Indianapolis, Ind.

Quiniobine.—Quinine bismuth iodide rendered soluble in olive oil by means of lecithin. Each cc. contains 0.03 Gm. of bismuth, 0.03 Gm. of quinine, 0.075 Gm. of iodine, and 0.22 Gm. of lecithin. Quiniobine is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis (New and Nonofficial Remedies, 1931, p. 94). It is claimed that, since in Quiniobine the quinine bismuth iodide is soluble, the injections are usually only slightly painful and the dosage is more accurate than with suspensions of quinine bismuth iodide. It is supplied also in the form of 2 cc. ampules. Spicer & Co., Glendale, Calif.—*(Jour. A. M. A.,* June 6, 1931, p. 1953).

Calcium Gluconate.—It contains calcium equivalent to not less than 12.4 nor more than 12.8 percent of calcium oxide. Calcium gluconate is used to obtain the therapeutic effects of calcium. It is more palatable than calcium chloride for oral administration and for hypodermic or intramuscular use is non-irritant.

Calcium Gluconate-Pfizer.—A brand of calcium gluconate-N. N. R. Chas. Pfizer & Co., Inc., Brooklyn, New York.

Concentrated Pollen Antigens-Lederle.—Liquids obtained by extracting the protein from the pollen of plants with a liquid consisting of sixty-seven percent of glycerin and thirty-three percent of a buffered saline solution. For a discussion of the actions and uses, see Allergic Protein Preparations, New and Nonofficial Remedies, 1931, p. 23. Concentrated pollen antigens-Lederle are marketed in packages of fifteen syringes containing increasing dosages; also in supplementary treatment packages of five syringes. The following product has been accepted: Concentrated Pollen Antigen (Lederle) Ragweed Combined (Common and Giant Ragweed in equal parts). Lederle Laboratories, Inc., Pearl River, New York.—*(Jour. A. M. A.,* June 13, 1931, p. 2036).

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

SMACO (206) POWDERED WHOLE MILK (S. M. A. Corporation, Cleveland). A powdered spray-dried whole milk hermetically sealed in tins in an atmosphere of nitrogen. It is claimed by the manufacturer that each 12-ounce can will make 2.8 quarts of liquid milk of normal strength.

FIRCH'S MA MADE BREAD (Sliced and Unsliced) (Firch Baking Company, Inc., Erie, Pa.). A white bread (sliced and unsliced) made by the sponge dough method. —*(Jour. A. M. A.,* June 6, 1931, p. 1953).

TOREX (Concentrated Beef Bouillon) (International Products Corporation, New York City). A semifluid mixture of beef extract, salt, vegetable extract, starch and powdered white pepper and onion; packed in block-tin tubes. It is claimed that this product dissolves instantly in hot water, that it permits the quick preparation of a warm drink for the home and camp table and that it is adapted for seasoning gravies, stews, etc.

BOWEY'S HOT CHOCOLATE POWDER (Bowey's, Inc., Chicago). A mixture in powdered form of chocolate liquor, cane sugar and skim milk flavored with vanilla extract. It is claimed that this product makes a wholesome and delicious beverage of high caloric value which can be used in the preparation of delicious desserts.

LIBBY'S STERILIZED UNSWEETENED EVAPORATED MILK (Libby, McNeil & Libby, Chicago). An unsweetened evaporated milk. It is claimed that this product approximates ordinary milk when diluted with an equal volume of water. It is proposed for use in infant feeding and may be used in cooking and baking as is ordinary milk. —*(Jour. A. M. A.,* June 13, 1931, p. 2037).

MERRELL-SOULE POWDERED PROTEIN MILK (Merrell-Soule Co., Inc., New York City). A powdered food made from milk; higher in protein and lactic acid and lower in lactose than dry whole milk. It is claimed that when restored to liquid form with water it closely approximates Finkelstein's protein milk formula. It is said to be indicated in cases of dyspepsia, alimentary intoxication, marasmus and celiac diseases.

SMACO (208) POWDERED SKIM MILK (S. M. A. Corporation, Cleveland). An almost fat free skim-milk powder hermetically sealed in cans in an atmosphere of nitrogen. This product is intended especially for infant feeding, each 8-ounce can being claimed to be equivalent to 2¼ quarts of normal strength liquid skim milk.

MEAD'S POWDERED LACTIC ACID MILK NONCURDLING NO. 2 PLAIN (Mead, Johnson & Co., Evansville, Ind.). A powdered, spray-dried homogenized milk containing added lactic acid. It is claimed that the powder may be readily mixed with cool or hot water to form a fine suspension. The mixture may be boiled without curdling or change of color or taste. It is recommended for infant feeding.

PAUL'S REDI-SLICED BREAD (Paul's Baking Corporation, Chicago). A white bread made by the sponge dough method, in sliced loaf form. It is claimed to be a bread of good quality.—*(Jour. A. M. A.,* June 20, 1931, p. 2104).

SAYLOR'S HOM-AID BREAD (Saylor's Bakery, Inc., Tamaqua Heights, Tamaqua, Pa.). A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

KWALITY TWIN LOAF BREAD (Kwality Baking Company, Champaign, Ill.). A white twin-loaf bread made by the sponge dough method. It is claimed to be a bread of good quality.—*(Jour. A. M. A.,* June 27, 1931, p. 2197).

PROPAGANDA FOR REFORM

MORE MEDICAL FRAUDS.—The following are some of the minor swindles that have been debarred from the mails: Flowering Herb Company. This was the trade name used by one Walter L. Klinger, who did business from 5529 Dakin Street, Chicago. He sold some herbs under the claim that they would cure diabetes. The United States mails have been closed to the Flowering Herb Company and its officers and agents. Amol Company: The Amol Company of New York was a trade name used by one Maurice Lundin in the sale of what he called "Amol Pep Tablets". Under various trade names Lundin has been swindling the public for years through the United States mails by one scheme or another, largely of the sexual impotence variety and a number of fraud orders have been issued against these fraudulent schemes. Now a fraud order has been issued against the Amol Company because of the sale of Amol Pep Tablets. Until the postal authorities put Lundin in the penitentiary he presumably will continue to swindle the public. Fong Wan Herb Company: This was a trade name employed by Fong Wan, who sold through the United States mails so-called Chinese herbs that were alleged to cure various diseases and ailments. The mails have been closed to the Fong Wan Herb Company. Texan Products Company: This was a trade name used by Mrs. B. M. Cabanes, of San Antonio, Texas, who was selling through the mails two products—Gonococorina, which was claimed to be a cure for gonorrhea, and Anti-Pyorrhea, sold as a cure for diseases of the mouth, bleeding, inflamed gums, "bad breath", etc. A fraud order having been previously issued on a business run by this woman under the name, National Medical Products Company, it has now been extended to cover the Texan Products Company. Universal Sales: This was a trade name used by one C. H. Bernard, who sold through the mails a so-called Vacuum Muscle Massager, commonly known as a vacuum pump, for the alleged purpose of developing the male sexual organ. The business was declared a fraud and debarred from the mails. Holmes' Dead Shot: Benjamin P. Holmes, a Georgia farmer, for some years sold through the mails a fraudulent nostrum for the alleged cure of syphilis and gonorrhea. The post office authorities issued a fraud order against Holmes, debarring him from the use of the United States mails. Subsequently the same scheme was operated under the names of Mrs. B. P. Holmes and Effie Holmes and the order was extended to include these names. Still later the business was continued under the name of O. Holmes and the fraud order was extended once more. It seems a pity that Holmes has not been prosecuted criminally and sent to the penitentiary.—*(Jour. A. M. A.,* June 6, 1931, p. 1974).

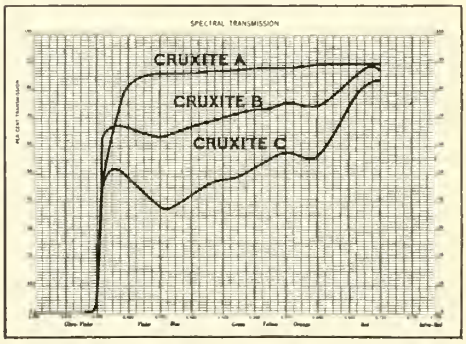
PHENO-ISOLIN.—According to the Scientific Manufacturing Co., Inc., "The chemical composition of Pheno-Isolin is practically identical with that of chaulmoogra oil. * * * This combination is brought about by a condensation product of the phenols with thymol, in solution in vegetable oil." There appears to be no scientific data that substantiate the claimed composition of the product. The product is advertised blatantly under such catchlines as "How to Prevent and Destroy Infection". Unusual arguments are offered in support of the claims made.—*(Jour. A. M. A.,* June 6, 1931, p. 1978).

SULFOBETIN NOT ACCEPTABLE FOR N. N. R.—Sulfobetin is a product of Sulfobetin-Vertrieb, Bratislava, Czechoslovakia: its consideration was requested by the American representative, Alex Friedmann & Co., Chicago. Sulfobetin is marketed in the form of tablets: Sulfobetin Antidiabeticum; Sulfobetin Bio, and Sulfobetin Cutis. Sulfobetin is stated to consist of organic nitrogen containing sulphur iodide compound. Sulfobetin Antidiabeticum was stated to contain Sulfobetin and yeast; Sulfobetin Bio was stated to contain Sulfobetin and powdered iron; and Sulfobetin Cutis was stated to contain Sulfobetin, yeast and animal charcoal. The Council on Pharmacy and Chemistry reports that Sulfobetin, Sulfobetin Antidiabeticum, Sulfobetin Bio and Sulfobetin Cutis are unacceptable for New and Nonofficial Remedies (a) because the identity and chemical composition of "Sulfobetin" is indefinite and because no evidence is supplied to show that

(Continued on adv. page xx)



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AMERICAN OPTICAL COMPANY

TRUTH ABOUT MEDICINES

(Continued from page 454)

the composition and uniformity of the preparations stated to contain it are controlled; (b) because no evidence for the therapeutic value of Sulfohetin or of the preparations containing it has been supplied; (c) because the names Sulfobetin Antidiabeticum and Sulfobetin Cutis are therapeutically suggestive, and (d) because no evidence for the rationality of a mixture of Sulfobetin with yeast, of Sulfobetin with powdered iron, or of Sulfobetin with yeast and animal charcoal has been furnished.—*(Jour. A. M. A.,* June 13, 1931, p. 2036).

USE OF SALINIZED WATER IN INDUSTRY.—At the present time salines are regarded as preferable to dextrose in the prevention and treatment of factory cramps due to excessive loss of fluid and salines through sweating. Both prevention and treatment of cramps are well abetted by the intake of dilute saline solutions to compensate for loss through sweating. It is, however, undesirable that tablets of salts be taken into the body as such. It is better that the entire water supply be treated with salt to the extent of 1 percent. A strength from 0.3 to 0.5 percent, being more palatable, may lead to more extensive use, especially if kept at a temperature from 47 to 52 F. —*(Jour. A. M. A.,* June 13, 1931, p. 2055).

CROWN MEDICINE CO., THOMAS REED'S FRAUD DEBARRED FROM THE MAILS.—The Crown Medicine Co. was a mail-order fraud operated from Atlanta, Georgia. A fraud order debarring the Crown Medicine Co. and its officers and agents, as such, from the use of the United States mails was issued by the Post Office Department. The Crown Medicine Co. was the trade name used by one Thomas Reed. For years Reed has sold a preparation called Crown Treatment, representing that when used as directed, the preparation would cure pellagra. When the Crown Treatment was analyzed by the federal chemists it was found to be a mixture of potassium iodide and mercuric chloride, with a small amount of iron sulphate and aromatic material.—*(Jour. A. M. A.,* June 13, 1931, p. 2053).

BISMUTHOIDOL NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that in 1926 Les Laboratoires Robin, Paris, France, requested acceptance of Bismuthoidol, which was stated to be colloidol hismuth in isotonic solution. The product is distributed in the United States by E. Fougera & Co., New York. The Council examined the submitted evidence and informed the proprietors that it was insufficient to establish the claims advanced for the product. In 1930 E. Fougera & Co. again requested consideration of Bismuthoidol. The Council examined the further evidence which was submitted and informed E. Fougera & Co. that Bismuthoidol is at present unacceptable for New and Nonofficial Remedies because the submitted advertising shows that, if accepted, its acceptance would be used to advertise unaccepted products and because the claims made for the product are unwarranted. The Council's report calls attention to the fact that, while the Council holds the intravenous administration of bismuth preparations unsafe, Bismuthoidol is used intravenously.—*(Jour. A. M. A.,* June 20, 1931, p. 2104).

REFISTINE NOT ACCEPTABLE FOR N. N. R.—According to the information sent the Council on Pharmacy and Chemistry hy the American distributor, Refistine is the dry extract of a Brazilian plant belonging to the group of "strychnoses", marketed in the form of tablets. The preparation is claimed to be efficacious to combat hypertension, arthritism, arteriosclerosis, rheumatism, etc. The Council found Refistine unacceptable for New and Nonofficial Remedies because no evidence for the therapeutic usefulness of the preparation had been furnished and the claims for its use are unwarranted; because it is marketed in a way that may lead to its ill-advised use by the puhlic; and because no evidence was supplied to show that the composition and uniformity of the preparation is controlled adequately.—*(Jour. A. M. A.,* June 27, 1931, p. 2197).

ABSTRACTS

OBLIGATIONS OF THE MEDICAL PROFESSION

In the president's address before the American Medical Association at the Eighty-Second Annual Session, Philadelphia June 9, 1931, E. STARR JUDD, Rochester, Minn. (*Journal A. M. A.,* June 13, 1931), stated that the medical profession can help society a great deal by utilizing every effort at its command to educate people along medical lines. The idea of medical education for the public is not a new one, hut the importance of it is more fully realized now than it was in former years. Every physician can do his part in this work in his daily visits and contacts with his patients. If this personal contact with patients is not carried out in an interesting, enthusiastic and educational manner, the physician is not fulfilling his professional obligations. There are many ways in which information concerning medical facts may be given to the public that are certain to be helpful in establishing a more confident and intimate relationship between the public and the profession. Public health and other medical lectures sponsored by county medical societies should be one of the important obligations of the county society. These lectures may be abstracted and published in the daily press. Under the supervision of the secretary or other officer or committee of the medical society, all medical news at his command should be made available to the press. The press has shown itself willing and anxious to publish this information and to cooperate with the profession in every way. The radio as a means of disseminating medical news and information in which the public is interested, and about which it should know, is being employed extensively, and undoubtedly it will be used more. Properly regulated and controlled by medical societies and their officers, this plan of giving out medical facts is certain to lead to results of great value. Those who control the radio corporations are overwhelmed with applications for time on their programs to broadcast quack remedies and cures, and they are anxious to know what should be accepted and what should not. It is one of the obligations of the medical profession to give them this information. The consensus among members of the medical profession generally is that some sort of publicity should he supplied by which the public will be made to understand the nature, the purposes and the results of the efforts made by scientific medicine for prevention and control of disease. The profession of medicine is under obligation to protect the public from unsound programs as much as to see that it is informed on the proper principles. A committee on public relations composed of members who have made studies of these problems, and who appreciate the obligations of the profession to the public, is a valuable part of a state organization. The organization of all medical activities in each state, so that the public health association, state medical association, and all other associations and auxiliaries are under the one head helps greatly to coordinate all medical activities. This scheme brings the medical profession as a whole into the leadership of all activities pertaining to medicine within the state. It is not only the privilege of the profession to assume this leadership, but it is also its solemn obligation to direct all medical activities. Society must be made to realize that organized medicine is perfectly able to control and operate its affairs without the help of the government or other outside organizations and that it can do so to the advantage of every one concerned. It is the obligation of the profession to continue studies to help to establish itself in its proper place in relation to the local, state and national government. All physicians must realize that an organization that is responsible for the health and lives of so many individuals each year and that is economically responsible for the expenditure of so much time, energy and money has a large responsibility and obligation.

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ORIGINAL ARTICLES

THE MODIFIED ASCHHEIM-ZONDEK PREGNANCY TEST*

(A DEPENDABLE LABORATORY TEST FOR THE DIAGNOSIS OF PREGNANCY)
(WITH REPORT OF CASES)

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The importance and desirability of a dependable test for the early diagnosis of pregnancy has been recognized since the dawn of medicine. Aschheim tells of a 3,000-year-old Egyptian papyrus which recorded that "by placing some earth and barley in a vessel and adding urine day by day, if the barley grew a woman could tell that she was pregnant". Since then we have had the Abderhalden test, the ovarian sex hormone test of Mazer and Hoffman on castrated animals, the Porges skin test, etc. In 1928, from the Charity Lying-in Hospital at Berlin, came the report of the Aschheim-Zondek pituitary hormone test for pregnancy, which has been shown to have a scientific biologic basis, and an unusually high degree of accuracy, in its present refinements.

Studies of the endocrine system have revealed the influence of the hormones of the ovary and pituitary gland on sexual functions. Erdheim and Strumme *(Beits. Z. Path. Anat. U. Z. Allg. Path.* 46:132, 1909), first noted marked changes in the histology of the anterior lobe of the pituitary gland in pregnancy. Evans and Long *(Prac. Nat. Acad. Sc.,* 8:38, 1922) and Smith and Engle *(Am. Jour. Anat.,* 40:159, Nov. 1927) noted that injecting anterior pituitary substance into mice caused marked changes in the ovaries, and brought on estrus. Aschheim and Zondek *(Klin Woch.,* 7:30, July 22, 1928), not only confirmed these observations, but discovered that during pregnancy there was a striking overproduction of the hormone of the anterior pituitary lobe, which was excreted in large amounts in the urine. These facts suggested to them the basis of a practical test for pregnancy, namely, to inject this hormone containing urine into immature virginal female mice, a positive reaction being manifested by swelling, congestion, hemorrhage and premature maturation of the ovarian follicles, easily visible to the naked eye. Associated with this was enlargement and congestion of the uterus and tubes, opening of the vagina and production of estrus.

Technique of Aschheim-Zondek Test. Five female virgin mice from three to six weeks old, and weighing ten to fifteen grams, are injected subcutaneously with patient's clean, fresh, filtered, acid morning urine three times a day for three days. As a check five other mice simultaneously are injected with known non-pregnant urine. Twenty-four hours after the last injection the mice are autopsied and the sexual organs studied.

Types of Reaction. Three degrees of reaction are recognized in the ovaries and tubes. Reaction I: Slightly enlarged and congested ovaries, with enlarged Graafian follicles, but no hemorrhage. These changes are credited to ovarian sex hormone. Reaction II: Hemorrhagic and ruptured follicles with discharge of ova. Hemorrhagic spots may be pin point or larger. Graafian follicles are enlarged and bulge out from surface. These findings when proven by microscopic section are diagnostic of pregnancy. Reaction III: Includes Reaction II, but advanced to the state of ripe follicles with formation of corpora lutea. This when checked by microscopic examination indicates advanced pregnancy.

Since this method, using ten mice for each test, would require the maintenance of a very large colony of mice to produce an adequate supply of young females, attempts have been made to modify the test by using other animals such as rats and rabbits. From a physiological standpoint the rabbit is the ideal animal for this test, because: First: The uterus and ovaries of the rabbit are considerably larger than those of the mice, so reactions are much more apparent. Second: The ovaries of an unmated female rabbit, no matter what age, contain neither corpora lutea nor corpora hemorrhagica, since the rabbit ovulates only after coitus. Third: The rabbit's sexual organs respond quickly and strongly to the pituitary substance in the pregnant woman's urine. Fourth: Any rabbit doe will do so long as it is more than three months old, is not pregnant, and has not had coitus within eight days of the test. Since the

*Read before the Fort Wayne Medical Society, January 20, 1931.

rabbit's period of gestation is about thirty days, if recently purchased rabbits are used palpation should determine if pregnancy is present. In maintenance of female rabbits it is best that they be isolated, since one doe may be hopped by another in heat, and have a twenty-day term of pseudopregnancy.

Friedman, M. H., of the Department of Physiology, University of Pennsylvania *(Am. Jour. Phys.*, 90:617-622, Nov. 1929), reported the first use of the rabbit as a test animal. His work was corroborated by Reinhart, H. L., and Scott, Ernest, before the Am. Soc. of Clin. Path. at Detroit in June, 1930, and reported *(Am. Jour. Clin. Path.*, 1:113, March, 1931).

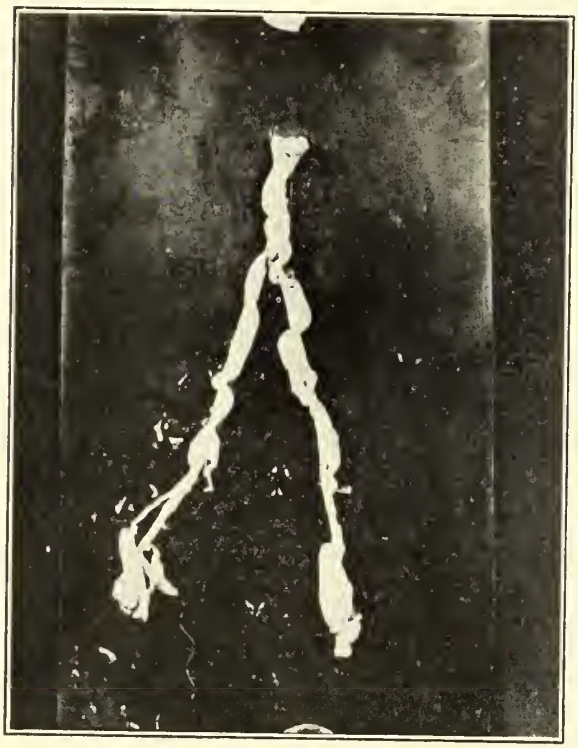


FIG. 1—Negative Reaction: Rabbit's ovaries, tubes and uterus unchanged.

As reported by Friedman, M. H., and Lopham, M. E. *(Am. Jour. Obs. and Gyn.*, Vol. XXI, No. 3, 405, March, 1931), the refined test is as follows:

Test: A fresh uncatheterized sample of urine is collected which must be acid when passed. Four to five cubic centimeters of filtered urine is injected intravenously two to three times a day for two days. The next morning the rabbit is autopsied and sexual organs examined. Fresh corpora lutea or bulging hemorrhagic follicles constitute a positive test. The urine should be kept on ice and filtered before injection.

In tabulated statistics from the available reports of thirty observers from all parts of the world, 4,802 tests show the average percentage of error is 1.07 percent; 3,885 pregnancies of average duration of sixty-nine days gave 52 negatives, an average error of 1.3 percent; 652 non-pregnancies, *i. e.*, not known to be pregnant, gave six positives, a possible error of 1 percent.

The evidence is conclusive that the appearance in the urine of large amounts of hormone (normally found in the anterior lobe of the hypophysis), in conditions unassociated with pregnancy, is very rare indeed. Crew *(British Med. Jour.*, Apr. 5, 1930), working in the "Pregnancy Diagnosis Station" of the University of Edinburgh, found that the test shows positive in cases of retained adherent fractions of placenta in incomplete abortions, in cases of hydatid mole and in chorioepithelioma, but that a dead fetus or dead placental cells will not react. So in the presence of a dead fetus and placenta, a negative reaction will result, a diagnostic point which may be of considerable importance at times. In pregnancy this test will remain positive as long as living placental tissue is in biologic contact with the maternal blood. In tubal pregnancy experience in thirty cases showed the test becomes negative within seven days after the death of the fetus, another important prognostic point. In the case of an hydatid mole, a test should be made ten days after its expulsion, for so long as there is a live remnant of mole left in the uterus the test will continue positive.

As to the respective value of tests, due to anterior pituitary hormone and of those due to ovarian sex hormone, it has been shown that in functional amenorrhœa in non-pregnant women, large amounts of ovarian sex hormone are secreted, and that in pregnancy, the ovarian hormone curve reaches its full development coincident with syncytial cell development at the third or fourth month, continuing throughout pregnancy. As regards the anterior pituitary hormone, examination of its curve shows an abrupt rise immediately on impregnation, coincident with the development of the trophoderm and its derivatives, particularly Langhan's cells, remaining constant for about five months, then gradually falling coincident with the disappearance of Langhan's cells, but persisting in appreciable amounts for seven days after delivery, or for as long as live placental remnants remain in the uterus. Thus it will be seen that the pituitary hormone test should be positive in a few days after impregnation, while tests due to ovarian sex hormone would not be positive until at least the third month, and then are not specific.

An analytical study of interesting details of these reports, having in mind Aschheim's rationale that the test becomes positive as soon as impregnation occurs, is as follows:

Positive Pregnancies. We find the earliest pregnancies found by tests as follows: One woman whose menstruation was three days overdue. Aschheim found positives in several women seven days overdue. He cited two cases in which the first test, just before the menses were due, showed only large follicles, but a second test four days

after the menstruation missed gave a definite positive. Two cases were nineteen days overdue. Two cases were twenty-eight days overdue. Five were within forty days of last coitus. One was within twenty-six days of last coitus. Of 199 pregnancies of 3-5 weeks' duration 194 were positive, or 97.5 percent. Of 240 pregnancies of 6-8 weeks' duration 238 were positive, or 99.1 percent.

Non-pregnancies. 27 tests on males were all negative; 295 cases of functional amenorrhœa were negative; 11 cases of intermittent bleeding were negative; 25 cases of pelvic disease were negative; 28 cases of ovarian tumor and cysts were negative; 40 cases of uterine myomata were negative; 1 case of pituitary tumor was negative; of 17 cases of menopause, one showed a weak positive; 2 cases during lactation were negative; 40 cases of endocrine disturbance were negative; 66 cases of cancer of uterus and adnexia showed 2 positives; 44 cases of miscellaneous diseases showed 2 positives. Total, 595 cases of non-pregnancies gave 5 false positives, or less than 1 percent error.



FIG. II—Positive Reaction III. Rabbit's uterus and tubes enlarged and congested. Hemorrhagic follicles in both ovaries. Corpora lutea showing in ovary on right side as light spots surrounded by hemorrhage.

In my own series of 56 cases, consisting of 29 positives and 27 negatives, the time check-up has proved the correctness of the diagnosis, except in one case (Case 16), which gave a false negative. In the first of the following case reports the urine was toxic for the laboratory animal:

Case 1. Mrs. S., age twenty-six, irregular menstruation, vomiting and marked acidosis. First test: Injected rabbit with five cubic centimeters urine. Rabbit died in eight hours. Second test: Under treatment until toxemia subsided, and then a second rabbit was injected, which was autopsied in forty-eight hours. Both ovaries enlarged, with numerous enlarged hemorrhagic follicles. This was made about the second month.

Case 2. Mrs. Z., age twenty-one, has missed two menstrual periods. Question of pathology in tubes or pregnancy. Five cubic centimeters urine injected and rabbit autopsied in forty-eight hours. There was marked enlargement of uterus and tubes, with intense congestion. Many hemorrhagic follicles in both ovaries, with blood stained ova discharged into the fimbriated extremities of tubes. Corpora lutea present. This reaction III is evidence of an advanced pregnancy. This woman was delivered in December, so this test was made at about four months.

Case 3. Mrs. H., menstruation never regular. Has missed two menstruations, no other symptoms. AZR (Aschheim-Zondek reaction), negative.

Case 4. Mrs. P., short and stout, age twenty-two, two children, youngest 1½ years old. Menstruated throughout the previous pregnancies. Present history: Missed a menstruation four months ago, had two menstruations the next month, then missed a month, then menstruated about a month ago. Two weeks ago had a discharge of clear fluid followed by a menstrual flow. Two AZR's were made with negative results in both. This was checked by an x-ray which was negative. This test has been corroborated by time.

Case 5. Mrs. H., age twenty-eight, menstruation always irregular. Has not menstruated for three months. AZR strong positive. Both ovaries showed hemorrhagic follicles and corpora lutea. Uterus markedly enlarged and congested.

Case 6. Miss A., age nineteen, had missed two menstruations. Very obese. AZR positive.

Case 7. Mrs. R., two months since last menstruation. Miscarriage six months ago. Has morning sickness. AZR positive.

Case 8. Miss X., age thirty, has had irregular menses all her life. Sometimes goes eight to ten weeks. Seven weeks since last menstruation. AZR positive.

Case 9. Mrs. B., age forty, uterus enlarged. Has missed two periods. Question as to pregnancy or fibroid. AZR positive.

Case 10. Mrs. S., age thirty-two, has baby six months old. Has not menstruated for two months. AZR negative.

Case 11. Alice W., age twenty-two, single. History of irregular menstruation. Has missed three menstruations. AZR negative.

Case 12. Mrs. F., age forty-two, very obese, mother of two children. Has not menstruated for five months. Breasts enlarged. Differential diagnosis as between pregnancy and menopause. AZR negative.

Case 13. Mrs. W., age forty-six, 2½ months

since last menstrual period. Question of fibroid cyst or pregnancy. AZR negative. Operative finding, cystic fibroid.

Case 14. Miss R., age twenty-four. Has some nausea and claims to feel fetal movement. Menses present, but scant. Medico-legal question of paternity. AZR was negative.

Case 15. Mrs. O., weight 154, age forty-four, diabetes for five years. Last menstruation October 11th. Six months ago menstruation began to get scant and irregular, sometimes two weeks over. Missed seven weeks in August. Has severe vaginal pruritis. Two children, nine and fifteen years. Never had nausea with either child. Question of pregnancy or menopause. AZR negative.

Case 16. Mrs. Mc., has missed one menstruation. One injection of five cubic centimeters of urine gave a negative reaction. Pregnancy developed. (False negative.) Comment: At this time the method was to give only one intravenous injection. Experience of others like this has led to modification of the technique, so that now two injections are given daily for two days, instead of relying on a single injection.

Case 17. Miss T., age fifteen, said to have missed four menstruations and admits intercourse. One injection of five cubic centimeters of urine resulted in one bulging follicle without hemorrhage, which was considered a doubtful reaction. Another rabbit was injected with twelve cubic centimeters of urine, which gave a positive reaction, consisting of one bulging hemorrhagic follicle.

Case 18. Mrs. K., age thirty, presumed to be six months pregnant. A tooth was extracted at two months, at which time bled a little from the uterus. Movements could be felt up to 5½ months, and then stopped ten days prior to test. Previous history, always regular, two healthy children. Five cubic centimeters of urine injected into rabbit. Reaction: Uterus and ovaries slightly congested. Marked enlargement of ovarian follicles. No hemorrhagic follicles. No corpus lutea. Result was considered to be Reaction I, and due to the ovarian sex hormone which continued in the urine, while the pituitary hormone disappeared as the fetus died. This case miscarried seven days later with a soft mushy fetus.

Summary:

1. The urine must be fresh and acid when passed. It should not be more than five hours old. Two drops of tuluol or phenol per ounce of urine may be added if urine is to be mailed or a sterile catheterized sample taken.

2. In cases of toxemia of pregnancy, the urine may be toxic for laboratory animals. Crew found urine toxic to animals in three of his cases. I have had one.

3. A positive reaction indicates either pregnancy, ectopic pregnancy, chorioepithelioma, or hydatid mole.

4. After delivery or abortion test will disappear in three days, but will remain positive if living placental remnants persist in the uterus.

5. From a medico-legal standpoint this test should be of great value in simulated or questionable pregnancies.

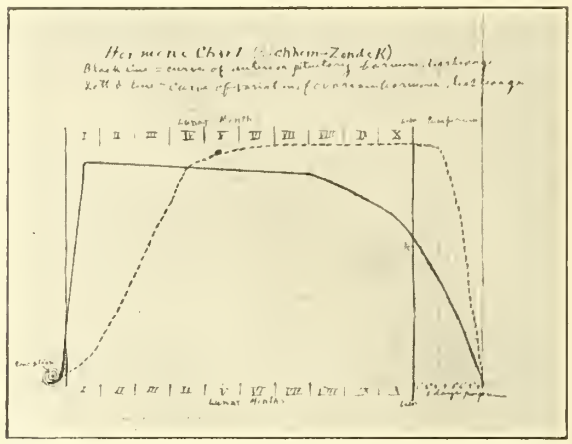


FIG. III—Note that the pituitary hormone (represented by the solid line) reaches its maximum discharge by the middle of the first month and disappears within seven days after delivery.

6. In amenorrhœa and other conditions simulating pregnancy its value for differential diagnosis is far reaching.

7. In collected statistics of 502 tests by Friedman's rabbit method, there were four false or doubtful reactions, equivalent to a possible error of 1.07 percent, coinciding exactly with that of the original test.

8. With an error, in all conditions, of about one percent, Friedman's modification of the Aschheim-Zondek test for pregnancy recommends itself for its simplicity, and as a remarkably dependable and reliable procedure in the diagnosis of pregnancy, early or late.

CONDUCT OF LABOR IN CASES OF MODERATE PELVIC CONTRACTION*

DAVID L. SMITH, M.D.
INDIANAPOLIS

Comparison of maternal mortality in childbirth in this and other countries has forced a lay as well as professional recognition of the necessity for making the process of delivery safer in the United States than it is at the present time.

Much has been written recently regarding the method of lowering mortality in such major obstetrical tragedies as placenta previa, toxemia of pregnancies with convulsions and premature separation of the placenta. Such conditions are so spectacular from the onset that usually the patient is rushed to a good hospital and surrounded immediately with all the safeguards of modern obstetrics. As a result mortality in these conditions is being reduced.

*Presented before the meeting of the Marion County Medical Society, April 7, 1931.

There is another group which does not present such an obvious picture of impending trouble and so may not receive such careful consideration. This group consists of the women with moderate contraction of the pelvis.

Proper management of cases of moderate pelvic contraction is often a most difficult matter. The dwarf, the kyphotic, or the patient with one of the many other extreme pelvic contractions will usually be well managed, because the necessity for an elective cesarean section is obvious and elective sections usually do well. These are the exceptional cases, however.

Most women with pelvic contraction do not present such extreme a picture. The usual findings are those indicating only moderate degrees of pelvic contraction. The question then is—how shall such a patient be delivered? If we had no conscience the problem could be solved simply by doing routine elective sections on all women with any degree of pelvic contraction. This is not only wrong but unnecessary, for many such women can be delivered from below if managed properly.

To avoid unnecessary cesarean sections and still protect these borderline cases from the dangers of too lengthy labors we should resort to the intelligently conducted test labor.

Proper conduct of such a test labor is not complicated if a few basic rules are followed. But in obstetrics more than in any other field of medicine is it true that a safe or tragic termination of a case is predetermined by what has been done during the first hours of the condition. One vaginal examination done under faulty technique during the first hours of labor can change the clean case to one of potential infection or to the frankly septic.

The two most common mistakes in management of cases with contracted pelves are, first, failure to recognize the contraction prior to labor, and, second, contamination of the birth canal during labor.

Failure to recognize the abnormality results in exhausting labors of great length with maternal shock, tonic uterus, thinning or actual rupture of the lower uterine segment occurring as maternal complications and intracranial hemorrhage or asphyxia as fetal damage.

The dangers of contamination of the birth canal are well known.

No fixed set of rules can be set down as a guide for every case. However, a few general rules may well be observed in the management of cases of pelvic contraction.

First comes recognition of the contraction. Simple pelvimetry if applied to all pregnant women would avoid many a bad situation later.

We are primarily concerned with the size of the pelvic inlet. Is it normal in size and shape? We are aware that outlet contraction occurs, but outlet contraction is not so serious an obstruction to labor in most cases. If present it can usually be overcome by means of forceps and episiotomy.

Failure to diagnose contraction at the inlet is more dangerous to both mother and infant. If we can convince the profession of the need of inlet pelvimetry, they will then begin also to think of the outlet and its measurement.

Recognition of contraction at the inlet is not complicated. Three measurements, the external conjugate, the interspinous and the intercrestal, together with general inspection of the patient, will point out most cases of contracted inlet.

If all three of these measurements are below normal the diagnosis is general contraction of the pelvis. If the external conjugate is short, the pelvis is probably flat. If the interspinous is almost equal to the intercrestal and the external conjugate short, it is a rachitic pelvis. Checking the internal diagonal conjugate by vaginal examination should always be done in such cases. Taking this measurement is so easily done that it should never be neglected.

The one additional type of pelvic contraction which is frequently encountered is the male type. This will be recognized by general inspection of the patient rather than by external or internal measurements.

The thick set, stocky women with heavy bones, short forearms and stubby fingers should always be suspected of having the male type of pelvis. Her external measurements may be normal or even large, but on vaginal examination a narrow outlet, prominent ischial spines and deep symphysis will be found. This type of woman should immediately be classed as a potential candidate for cesarean section and guarded accordingly during the test of labor.

While the problem of dystocia occurs more frequently in primiparæ, we should not forget the multiparæ, especially the Para II who has been delivered the first time by some operative procedure. This brings up the importance of a complete history of a previous delivery. Was it normal or operative? Was the infant living or stillborn, and most important how much did the baby weigh? It has been said that the best pelvimeter is a normally sized baby.

If at the previous delivery the infant weighed seven pounds or more and was not damaged, it is safe to conclude the pelvis is workable regardless of measurements. If the infant weighed less than average or was stillborn, the pelvis should yet be considered questionable especially if the measurements are small.

The value of a careful history in a multipara is illustrated in the following instance:

Mrs. D. M., age twenty-one, Para II. At the time I first saw the patient she had been in labor sixteen hours. External measurements normal except external conjugate eighteen centimeters. Breech presentation, presenting part dipping into pelvis, cervix two fingers dilated. Sacral promontory not felt in course of vaginal examination done with patient in bed. However, the history of the first labor was that of a stillbirth as a result

of extreme difficulty in delivery of the head at breech extraction. This history made us suspect contraction of the pelvis which had possibly been overlooked at our first examination. The patient was put up in lithotomy position, given a light gas anesthetic, and under good technique re-examined. An overhanging promontory was discovered which shortened the obstetrical conjugate to eight and one-half centimeters and rendered impossible pelvic delivery of an average sized infant. A low cervical cesarean section was done and a living infant delivered. Maternal convalescence was uneventful.

Had not a careful history been taken in this case, we might have fallen into the same difficulty as the one who conducted the first delivery because this particular pelvic abnormality could not have been discovered by the ordinary routine internal pelvimetry. It was only when we had the patient in a position so that the examining fingers were pointed well toward the umbilicus that the abnormal promontory was palpable.

It was only the history that made us feel that some existing abnormality had been overlooked, and only this history which stimulated us to look further.

Complete examination of the patient at the onset of labor is the next source of information which guides us in the proper management of the patient with a borderline pelvis.

Diagnosis of position and presentation is first, in order to recognize a breech, occiput posterior or other abnormality. Is there any over-riding of the head? If so, we have rather definite evidence of disproportion between the head and the pelvic inlet. If over-riding is present and cannot be overcome by a short test labor, then cesarean section is rather definitely indicated and nothing is to be gained by further delay.

If there is no over-riding present, determination of the station of the presenting part is next in order in the examination of the patient.

Then the size of the infant should be estimated from the height of the fundus. If the infant is small, the test labor can safely be longer because of the greater possibility of vaginal delivery in such a case. If fundal measurement indicates a baby of more than average size, then less should be expected of the test labor.

By these means have we summed up the situation at the onset of labor and, therefore, are able more accurately to judge progress of labor.

Regarding actual conduct of the trial labor the first consideration is protection of the patient against infection. Therefore, examination should be by rectum instead of by vagina, as long as the rectal examination gives the desired information. Station of the presenting part can always be ascertained by rectum as also can cervical dilatation in most cases. We do not believe it possible to conduct every case properly without an occasional vaginal examination to check the rectal findings as to cervical dilatation and position, but much of the necessary information can be obtained by rectum, thereby reducing vaginal manipulation to a minimum.

When vaginal examination is done in a test labor in a case of borderline pelvis, preparation of patient and asepsis should be as nearly perfect as modern obstetrics makes possible.

We do not believe that cesarean section should be done on evidence obtained entirely by rectal examination. Too often on doing a final vaginal examination, a previously undiagnosed occipito posterior is discovered, or a cervix which felt completely dilated by rectum will be found only partially dilated or not dilated at all.

One of the first questions arising regarding trial labor is how long should it last. How many hours must the patient be in labor to demonstrate that she has had an adequate test labor? This varies with the force and frequency of the uterine contractions, the progress being made in cervical dilatation and the descent of the presenting part, the condition of the mother as indicated by pulse rate and temperature, and also upon how the infant is withstanding the labor as indicated by the fetal heart.

The purpose of a test labor is to demonstrate the possibility of vaginal delivery. As long as some progress is being made in descent and dilatation, labor should be allowed to continue provided there is no evidence of maternal exhaustion or fetal distress. Intelligent observation of all of these points is necessary.

We have seen a tonic uterus and fetal distress develop after only a few hours of labor due to early rupture of membranes and very forceful uterine contractions.

In another we recently advised still further labor even though the patient had already been in labor twenty-four hours. In this case the membranes were intact, the uterine contractions rather mild, the mother was not exhausted and the baby showed no signs of distress. At the time we first saw the patient—twenty-four hours after the onset of labor—there was moderate overriding of the head and a definitely flat pelvis. Yet after about eight hours' more labor, the head engaged and the patient was delivered normally from below. Had we been forced to make a decision earlier, cesarean section would have been done. Further test of labor proved the value of conservatism. Blindly hopeful conservatism, however, leads to trouble. Both patients must be observed constantly for signs of exhaustion or distress and the one in charge must know that progress is being made instead of merely hoping so. Constant lack of progress in descent, beginning maternal exhaustion, or beginning fetal distress are indications for interference.

To prevent exhaustion during such a trial labor nourishment must not be forgotten and relief of pain must be accomplished. Morphine, rectal analgesia and nitrous oxide properly administered many times make possible the additional hours of

labor rendering cesarean section unnecessary.

When maternal exhaustion, lack of progress or fetal distress, singly or in combination, indicate that the trial labor be terminated, what is the method of choice? In most instances cervical dilatation and station of the head determine whether delivery shall be by section or from below. From these two findings can we usually decide what will be the least traumatic and safest type of delivery for the woman in question. When the most dependent portion of the head (minus caput) is on the level with the ischial spines, then the head is engaged. An engaged head should be delivered from below, the cervix permitting.

However, if the head has not engaged after a vigorous trial labor, cesarean section is usually indicated. Of course, one should previously rule out correctible malposition or presentation, hydrocephalus or other fetal abnormality. Cesarean section is also contra-indicated in most cases where the infant is dead or non-viable.

After demonstrating the impossibility of vaginal delivery and after determining on cesarean section as the best method of terminating a given case, then choice of which type of cesarean section to be used is of great importance.

Study of cesarean section mortality statistics shows that the maternal risk increases directly with the number of hours of labor, and the amount of vaginal manipulation. This is particularly true with the classical technique.

If one insists in using the classical technique, one of two alternatives must be faced. In order to keep the maternal mortality down, one must do routine elective cesarean sections in all questionable cases, or be faced by a high maternal mortality.

The low double flap or low cervical technique fills this need. By using this technique we may safely resort to trial labor in borderline cases without any increase in mortality because of the trial labor. This presumes a properly conducted trial labor.

Classical cesarean section may yet have a field in the elective or clean case or where speed is indicated, but after trial labor, or in the case of early rupture of membranes, or where there have been several vaginal examinations, the low cervical cesarean has proved definitely safer than the older technique.

The writer has done twenty low cervical cesarean sections. There have been no maternal deaths. These were all cases where for one reason or another the classical technique would have proved dangerous.

In conclusion, one method of reducing maternal mortality in obstetrics is by improved management of the patient with borderline pelvic contraction. This can be effected by the following:

First, more attention devoted to pelvimetry in order that such contractions be recognized early; second, intelligent conduct of trial labor which will make fewer cesarean sections necessary, protect the mother against infection and protect the baby against injury; and, third, by use of the low cervical cesarean section instead of the older classical technique in such cases where trial labor indicates the impossibility of safe vaginal delivery.

ZINC IONIZATION IN THE TREATMENT OF RHINITIS AND NASAL ACCESSORY SINUSITIS

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Any acute or chronic inflammation of the mucous membranes of the nasal passages is usually termed rhinitis.

Etiology. The causative factors of rhinitis are still in doubt. Some claim the disease is purely due to bacterial invasion, others believe that it is the result of metabolic changes and still other groups believe that there is a focus of infection in the nasal accessory sinuses. The predisposing factors are anatomic variations such as deviations of the septum, spurs, ridges, adenoids, etc., which interfere with normal drainage and ventilation of the nose and accessory sinuses. Other causes are occupational, local irritants, such as dust, vapors, pollen, etc., and the internal administration of certain drugs and foods.

Pathology. Repeated attacks of rhinitis produce chronic alterations involving turgescence, hyperplasia and marked hypertrophy of the mucosa. At first we have simply an engorgement of the blood vessels which is followed by an increase in connective tissue formation.

Symptoms. The most prominent symptoms are obstruction and more or less discharge. The obstruction is intermittent and is usually worse after meals and at night. There is generally a collection of a considerable amount of mucous in the nasopharynx which gives rise to hacking, spitting, coughing and respiratory discomforts.

In dealing with sinusitis we nearly always have two conditions present, namely:

1. Nasal obstruction, which interferes with the proper drainage and ventilation of the sinus.
2. The invasion of bacteria.

Sinus surgery has not in a great many cases given us the results desired. In fact, many patients have been made worse following an operation of the sinus involved. It seems to me, therefore, that we should not be too hasty and operate, destroying vital structure, but should adopt a more conservative plan. I do not wish to be misunderstood, because I know that certain types of sinusitis are purely surgical and should be treated in that manner. By merely correcting intra-nasal obstruction such as submucous resection of the nasal septum or the like, many cases of sinusitis were cured or greatly relieved without any specific treatment to the sinus. Cases in which

we have a marked hypertrophy of the mucosa are not materially improved in spite of the fact that the anatomical deformity has been corrected. In these cases it is customary to do a complete or partial turbinectomy, cauterize the tissues, etc., resulting in scar tissue formation. Unless the bony structure of the turbinates is pressing tightly against the septum the above procedure is not necessary. One or two treatments of zinc ionization will bring about a sufficient amount of shrinkage to permit proper ventilation and drainage without interfering with the normal function of the mucous membrane.

In my hands zinc ionization for the treatment of catarrhal sinusitis in children has given splendid results. After one treatment the child is relieved of the constant nasal discharge, hacking or spitting, nasal respiration is improved, sleep is sound instead of restless and there is a marked change in the youngster's physical and mental make-up.

I have made no scientific investigation, but from clinical observations I am convinced that through ionization the medication is carried into the sinuses as evidenced by the results I have achieved.

Treatment. The treatment is divided into two parts, namely: (1) General. (2) Local. General treatment, which is administered by the general practitioner, should include proper measures for any constitutional disorder which may exist and the regulation of diet and hygiene.

The local treatment consists of eradicating and correcting any predisposing intranasal deformities or obstructions. After this is done some type of treatment should be given which will restore the tissues to their normal state. To bring this about I have used zinc ionization during the past two years and I am happy to state that it has given me by far the best results of any type of treatment that I have used heretofore.

Dr. A. R. Friel, London, England, is one of the pioneers in using physical therapy in otolaryngology. He has done a great deal of research work with ionization and has proved clinically its value. He states that zinc ions inhibit the activity of bacteria and are antiseptic in their action.

The technique is as follows:

1. Cleanse the nostril thoroughly, removing all mucus, crusts, etc.
2. Swab with a four percent cocaine solution two or three times.
3. Pack the nostril with strips of gauze saturated in zinc sulphate solution (one-fourth to one percent), leaving enough space at the bottom to permit the insertion of a zinc needle which is wrapped in cotton and saturated with the solution.
4. Attach the positive galvanic terminal to this needle. Apply the negative terminal to a sponge soaked in normal salt solution which is placed at the base of neck.
5. Turn the current on slowly to about ten M. A., if the patient can tolerate it, and run for ten minutes. Then turn the current off slowly.
6. Remove the packing.

The treatment is painless. The patient will experience a metallic taste and the saliva flows rather freely. On nasal inspection you will notice a grayish appearance of the mucous membrane which remains there for several days. Following the treatment there is a reaction which varies in individuals. There is always a swelling of the mucosa which after the first twelve hours gradually shrinks. At the end of a week you will notice a decided shrinkage of the turbinates resulting in improved ventilation and drainage. I treat only one nostril at a sitting for fear the reaction may be too great for the patient to tolerate. If a second treatment is necessary, I give it about three weeks following the first. One treatment if effective is good for at least six months. So far as I know there are no contra-indications.

Conclusions:

1. Zinc ionization, a non-surgical procedure in the office, is of unusual benefit in selected cases.
2. Intumescent and hypertrophic rhinitis lend themselves admirably to zinc ionization.
3. Zinc ionization is a valuable added means in the treatment of the nasal accessory sinuses.
4. Following intranasal surgery, zinc ionization is an ideal method of restoring the nasal tissues to normalcy.

Case Reports:

Case I. Mr. A. F., age thirty-five, printer. Referred to me February 6, 1930. He had suppurative sinusitis for the past six years. He was treated for this condition by several otolaryngologists with no appreciable results. He refused surgery. His general health was affected to such an extent that he was unable to work for two years. Upon examination, I found the frontal, maxillary and ethmoid sinuses involved on both sides, but much worse on the right. In the right nostril there were polypi present and a polypoid degeneration of the right middle turbinate. On February 8, 1930, I removed the right middle turbinate and polypi by electro-coagulation. He had no bleeding and was fairly comfortable following the operation. I punctured and washed out the left maxillary sinus on February 27th and the right one March 1st. March 10th he received a zinc ionization treatment in the left nostril and in the right on March 17th. Following these treatments he had considerable reaction lasting about ten hours. He returned for an examination March 25th very much improved. On March 31st he began to work repairing and painting his home. On May 3rd he resumed his regular occupation as a printer. I saw him last on June 5th and he was a different man both physically and mentally, extremely happy that he is again able to work and provide for his family after a lay-off of almost three years.

Case II. B. D. S., male, age eleven, May 29, 1930. He gives a history of having had a pansinusitis for years and was treated for same by a

number of competent rhinologists with very little improvement. He was not allowed to go swimming or camping, something he enjoyed very much. On May 29th I gave him a zinc ionization in the right nostril which was much worse than the left. On June 7th I gave him a zinc ionization in the left nostril. The right side did not respond as well as I would have liked, so I repeated the operation on the right side June 21st. Results were very good. The boy spent three weeks at the Boy Scouts' camp and participated in all forms of athletics, hiking, swimming, etc., without a return of his sinusitis. His parents decided to send the boy to Switzerland to school. They were so pleased with the marvelous results from the former treatments that they decided to have me give him another zinc ionization before he left for Europe, so on August 22nd I again gave him another treatment. The results were splendid.

Case III—L. B., age eleven, female. She had her tonsils and adenoids removed at five years of age. She was referred to me August 16, 1929, complaining of obstruction in breathing, especially at night, nasal discharge and frequent colds. Examination revealed the tonsils and adenoids completely removed. The nasal septum was slightly deflected to the left in the upper portion and to the right in the lower region. The turbinates were turgescent and the mucous membranes a deep red color. Diagnosis:—Hypertrophic rhinitis. I gave her a zinc ionization treatment in the left nostril and one in the right the following week. She returned to me September 20, 1930, with the history that she was free from colds all winter and had a perfect attendance in school as well as made better grades. The mother was anxious for her to have another zinc ionization treatment. I treated the left nostril and will ionize the right side this week-end.

I could go on and enumerate many other cases, but I selected these cases because I felt that they were typical and outstanding.

Discussion

C. H. McCaskey, M.D. (Indianapolis): I have no reason either to praise or condemn this method, as I have never used it, and my discussion will be based upon the literature which I have looked over. From Doctor Sputh's report of cases this method seems to be very satisfactory in his hands, and I imagine it is worthy of a trial by those of us who care to use it. I have had some experience with the use of zinc ionization in the treatment of certain types of chronic discharging ear, and have been very well pleased with it. The criticism might arise that with any other sort of treatment these would improve, but Doctor Sputh's cases indicate that other things have been tried with no result. But to say it is a cure-all, or that the cases remain permanently cured, is surely a mistake. Some of the writers on this subject, however, seem to think the method they use is a cure-all and that the cases do remain cured. Any time, however, that they get a reinfection of the middle ear cavity or sinuses, they will have trouble again.

In looking over the literature I came across an article by Norrie, of Calcutta, in the *Journal of Otology and Laryngology*, October, 1927, on this type of treatment. Norrie not only uses ionization, but uses electrolysis along with it. For instance, if he is treating the antrum he will use electrolysis to produce drainage, usually under the inferior turbinate, to produce bone destruction until there is a permanent opening. If he is treating the ethmoids he uses a needle and punctures the floor of the ethmoid in perhaps two or three different places, electrolyzing the floor of the ethmoid and thereby producing permanent drainage. If he treats the sphenoids he does the same thing. Then he describes his method of handling the frontal sinuses. I think the treatment he describes is based on acute and chronic cases. In acute cases of frontal sinusitis he refers to his method of using a pad of cotton or gauze soaked in sodium salicylate solution placed on the frontal bone, the negative pole on the back of the neck. He treats these cases over a considerable period of time, an hour or two at a sitting, and says he gets results.

One of the things that seems to be accomplished by treating these cases, according to the literature, is that they get a constriction of tissue which is beneficial to the connective tissue, as it has a tremendous astringent effect. Another effect is that of antisepsis.

A man named Andrew Campbell describes a method of treating the sinuses by ionization, in the *Journal of Otology and Laryngology*, February, 1928, in which he places the patient in the prone position, makes an electrode of the cannula, covering it with rubber tissue, and leaving about a quarter to a half inch of the needle sticking out through the insulation; he then passes the zinc solution through this, the patient on his face, and at the same time passes the current through the electrode.

I take it from Doctor Sputh's paper that he has had good results from this line of treatment, but whether it is any good in cases where there is bone necrosis, I do not know, but I am inclined to think from the literature that when there is bone necrosis it does not do very well. I imagine what he said relative to surgery is rather apropos. In other words, if you have obstruction, or a surgical condition, the use of zinc ionization will give a better and more rapid result from your surgery.

I think it is worth a trial and report at a later meeting.

Carl B. Sputh, M.D. (closing): I want to thank Doctor McCaskey for his discussion. I tried to make it clear in my paper that zinc ionization is not a cure-all; it is a medical treatment, and for any condition in the nose that will lend itself to medical treatment, I think ideal. In other words, you will cure the case much quicker and the results will last longer.

I have used zinc ionization in the ear with splendid results in selected cases. Where there

is bone necrosis you get no results, but if you can reach the infection in the middle ear, if you have a large enough opening in the drum so that the solution really passes through into the middle ear, you will get excellent results. Often if you have suppurative otitis media with an opening too small to permit the solution to pass through, zinc ionization will not give you good results.

The ideal method for nasal treatment would be to insert a post nasal pack and put the solution into the nose, but owing to the fact that the solution seeps through the packing into the nasopharynx, causing the patient to gag, you cannot continue the treatment long enough to do any good. So we find that packing the nose well above the middle turbinate and underneath the middle turbinate, then wrapping the zinc wire with cotton saturated in the solution and placing it high enough to touch the packing, will give you good results.

B. D. RAVDIN, M.D.: Do you give this treatment in the sitting or prone position?

DOCTOR SPUTH: In the sitting position. We used to have the indifferent electrode held in the hand or resting on the forearm. Doctor Morris, who is one of the leading men on galvanic currents in this country, claims the galvanic current runs in cycles, and if the electrode is held in the hand the current will run through and go down into the arm and you, therefore, miss the cycle. He suggests placing the indifferent electrode on the back of the head and the active electrode in the nose. The same with the ear—place the indifferent electrode on the opposite mastoid and the active electrode in the ear, and you will get much better results than you would if the patient held the electrode in the hand. Those who are using zinc ionization in ear cases know that we have good results by placing the indifferent electrode on other parts of the body. I am trying now to place the indifferent electrode as nearly as possible opposite the active electrode, and I hope to get better results.

OCCLUDING URETERAL STONES

(WITH CASE REPORTS)

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About four hundred years B. C. Hippocrates recognized both renal and bladder stone, describing the symptoms, and admonishing his students "neither will I cut them that have stone, but will leave this operation to those who are accustomed to perform it". The symptoms of the ureteral stone are variable. The diagnosis is often tedious and is sometimes overlooked for many years.

The diagnosis depends on symptoms, history, x-ray, cystoscopic observation, and the dye tests, and all are needed in most cases. If a ureteral stone is suspected the history should record all previous attacks of pain which might have been due to ureteral colic.

It is important to bear in mind that the ureter has both an abdominal and a pelvic portion. Also, that the ureter is not uniform throughout, but has several constrictions, one in the middle of the abdominal portion, one at the junction of the abdominal and pelvic portions, and one in the pelvic portion.

The x-ray is the most valuable aid in diagnosis, but does not show all stones.

Cystoscopic observation shows marked changes in the bladder when stones are impacted in the intramural portion of the ureter, but often appears normal when stones are at a higher level.

The dye tests are necessary to determine that no urine is passing the obstruction.

When the diagnosis is complete, we are not able to determine how long the kidney has been blocked, nor in early cases can we tell the extent of infection, if there is any. Shall we remove the stone impacted in the ureter, or should the kidney, the state of which we have no way of estimating, be removed also? This is a matter which deserves serious consideration. To be able to determine early and accurately that compensatory hypertrophy had occurred in the opposite kidney would be of great value in many cases.

The treatment of ureteral stones is medical, cystoscopic, or operative: medical in those who frequently pass gravel, cystoscopic in small stones that can be dislodged, and operative in larger stones that are damaging the kidney. The surgical treatment has not always been successful in that obstruction has often occurred post-operatively at the site of removal. In the case reports it will be noted that two ureteral catheters were introduced into the ureter during the operation. This method of drainage of the kidney offers less resistance to the outflow of urine than it is possible to obtain with a single catheter or with a double catheter which is available. The use of two catheters offers other advantages in that they cause the patient little discomfort, and permit pelvic lavage, when it is necessary. Many operators use no drainage of this type and consider it unnecessary. Some even think indwelling catheters are dangerous. Probably the chief objection is that a cystoscopy must be done before the abdomen is closed.

Mrs. B. entered the Methodist Hospital on February 21, 1929, with a complaint of frequency of urination, dysuria, and pain in the left side. She gave a history of a dull, aching pain over the left kidney area for the last ten or twelve years. She had had no serious illness, and the family history was good. The cystoscope entered the bladder easily, a catheter passed to the right renal pelvis without meeting obstruction, but the left ureter was occluded about four centimeters from the orifice.

A primary plate was made which showed two small shadows in the true pelvis, interpreted as

phleboliths. A larger shadow was seen on the left side a short distance above the others which was interpreted as a calculus in the lower end of the left ureter.

At the second cystoscopy a catheter was inserted to the point of obstruction in the left ureter and stereoscopic films were made. Five cubic centimeters of indigo-carmine was injected intravenously and was all collected through a ureteral catheter in the right side. This would seem to be sufficient evidence to justify surgical removal of the stone. However, the roentgenologist was not satisfied. An attempt was made to take a lateral plate which failed because of the density of the bony pelvis. Two wax-tipped catheters and one wax-tipped filiform were inserted in the ureter to the point of obstruction. All showed scratches. This was conclusive evidence.

Through a left para-median abdominal incision the ureter was exposed and the stone removed through a vertical slit in the ureter. Two ureteral catheters were then introduced with a cystoscope. These were dragged through the opening in the ureter and reintroduced into the proximal segment. The abdominal wound was closed with drainage and the catheters were allowed to remain in the ureter twelve days following the ureterolithotomy. The patient was dismissed from the hospital on March 26, 1929, and was advised to return after six weeks for observation, as we had no definite information that the left kidney was functioning.

She returned to the hospital on April 11th, at which time the urine recovered from the left kidney, after an injection of phenolsulphonephthalein, showed traces of dye too small to estimate in terms of percentage.

She returned again on July 12th, at which time a functional test of the left kidney showed 7 cc. of urine in 7½ minutes containing 4 percent of the dye.

She was observed on October 1, 1929, at which time the left ureteral orifice appeared normal. A number 7 catheter passed to the kidney pelvis without meeting obstruction and a pyelogram was made, which showed a rather large pelvis, but within normal limits. The ureter was broad, but was also within normal limits. Cupping was blunt; everything about the kidney suggested an early hydronephrosis with a possibility of stricture at the uretero-vesical orifice. The pyelogram was somewhat discouraging, but the urine excreted was reported practically normal, neither pus nor blood cells being found. The functional test was excellent, 8 cc. of urine being collected in 7½ minutes that showed 10 percent of the dye.

Recently I had a letter from Dr. A. J. Scholl, Los Angeles, California, stating that he had examined the patient and found the kidney and urine normal. The patient has enjoyed good health since the operation and the repeated cystoscopic observations were not made because of symptoms, but to determine the state of the kidney on the side which had apparently produced pain for ten or twelve years.

Mrs. G. entered St. Vincent's Hospital February 1, 1930, with a complaint of migratory arthritis. She had had a complete x-ray study for focal infection which was negative except for a shadow suggestive of a left ureteral calculus.

On cystoscopy the bladder was apparently normal, a catheter passed to the right kidney pelvis without meeting obstruction, but an obstruction was met on the left side at about the middle of the abdominal portion of the ureter. A primary plate showed an area of increased density just above the tip of the catheter on the left side. It was somewhat irregular in outline and not of the usual density for urinary calculus. Five cubic centimeters of indigo-carmine were injected intravenously and all collected through a ureteral catheter on the right side without any appearance of the dye from the left orifice. Through an extraperitoneal exposure, the stone was removed from the ureter and two catheters were introduced with a cystoscope, guided through the ureteral wound by the surgeon to the renal pelvis. These were allowed to remain in place for ten days following the operation.

On February 27, 1930, a pyelogram of the left side showed a normal kidney pelvis and a fair cupping of the calices except for a slight blunting of the superior group. There was some dilatation of the upper half of the ureter. Total phenolsulphonethalein was eighty. The patient was discharged from the hospital on the twenty-eighth day following the operation and was advised to return for observation after six weeks to determine whether or not the kidney was useful to her. She returned to the hospital for examination June 5, 1930, in generally good condition. A functional test showed less than five percent dye recovered in the urine from the affected kidney.

On January 7, 1931, she returned again for a cystoscopy. At this time the ureter was dilated to size 14 French, and no obstruction was noted. The dye was excreted readily.

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PYOGENIC INFECTION OF THE PAROTID GLAND*

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INDIANAPOLIS

There seems to be a dearth of articles in otolaryngological literature and text-books on infection and suppurative inflammation of the parotid gland. As this malady is usually treated by the general surgeon or the specialist in head and neck surgery, most of the available articles dealing with the subject have been presented by surgeons. But a patient with a suppurative parotitis may and does seek advice from an

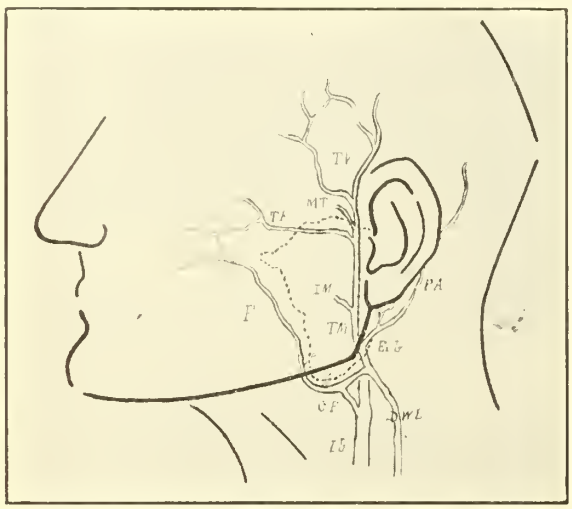
*Read before the Indianapolis Medical Society, April 28, 1931.

otolaryngologist because of the character of the symptoms, such as pain and swelling in or about the region of the ear, and swelling and inflammation of the pharynx.

A few words on the relation of the parotid gland to other anatomical structures may give a better understanding of the results that may follow serious lesions of the gland.

The space in which the parotid gland lies is in close proximity to important structures. The inner surface of the gland extends deeply into the neck, encroaching upon the pharyngo-maxillary fossa, a space which is anatomically and surgically very important. The pharyngo-maxillary fossa is cone-shaped and its boundaries or relations are: externally, the parotid gland (without fascia), internal pterygoid muscle, and the submaxillary gland; internally, the superior constrictor muscle with tonsil attached (thus the parapharyngeal tissues lie in close proximity to the pharyngo-maxillary fossa); above (the base of the cone or fossa), the jugular foramen; posteriorly, the prevertebral muscles; below, the carotid sheath, extending into the mediastinum.

The parotid gland is so placed that it comes in contact with the internal jugular vein and internal carotid artery. Any infection of the gland, because of its proximity to large blood vessels, nerves, and lymphoid spaces, offers a possibility of serious complications. Communicating lymphatics and veins extend in all directions from the lobes of the parotid and from the area outside the fascia of the gland.



Veins which traverse the substance of the parotid gland and those that are in intimate relation with the gland are: temporal, transverse facial, internal maxillary, temporo-maxillary, external jugular, posterior auricular, facial, and internal jugular. Dotted line shows outline of parotid gland.

The pharyngo-maxillary fossa communicates with the deep connective tissue spaces of the pharynx, so that a pharyngeal or retropharyngeal infection can extend to the parotid gland, or pus from a suppurative parotitis may burrow into the tissue spaces of the pharynx.

The duct of the parotid gland, known as Stenson's duct, extends across the inner side of the cheek, a finger's breadth below the zygoma, and opens toward the mouth opposite the second molar tooth of the upper jaw. Discharges of duct and gland pour into the mouth.

Formerly it was thought that most of the infections of the salivary glands were of a metastatic origin, but now it is believed by many that infections are carried to the salivary glands by the excretory ducts. The infection may be of any grade from a subacute, mild suppuration to a virulent, spreading phlegmon.

The following complications[1] may arise from infection of the parotid gland: retropharyngeal abscess, external auditory canal abscess, temporal fossa abscess, cervical abscess, phlebitis, septicemia, facial paralysis, and neuralgia of the temple. One authority has reported cases of intracranial infection from suppurative parotitis along the branches of the fifth nerve. I believe the infection passes along the venous channels. Within recent months a case of parotitis complicated with meningitis has been reported by Dr. Shields, attending dentist at the Long Hospital. This case will be referred to later.

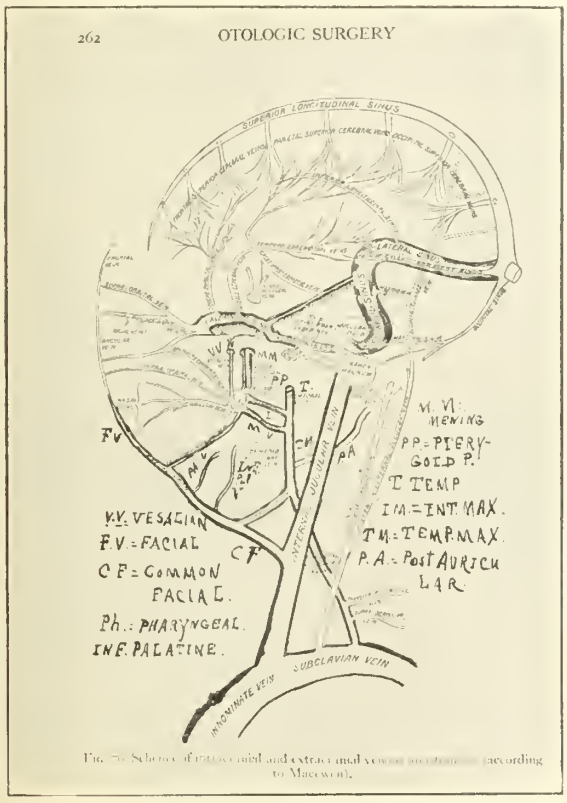
Pyogenic parotitis occurs most frequently as a postoperative complication, usually after an abdominal operation. It may accompany acute or chronic illness. Osler and McCrae[2] state that Stephen Padgett called attention to the fact that there was a connection between injury of the abdomen or pelvis and parotitis, especially in cases of injury to the abdominal wall, the peritoneum, or the pelvic cellular tissue.

In the surgical records of the Long Hospital the writer has found eleven cases of parotitis treated since 1925. Of these cases three followed abdominal operations, two operations on impacted molars, one developed after a fractured femur, two accompanied an illness, one was due to accidental infection of the duct, one followed an infected throat, and in two cases the cause was unknown. The operations were: carcinoma of stomach, followed by bilateral parotitis; posterior gastro-enterostomy for ulcer of stomach; and appendix operation for chronic appendicitis (diagnosis included abscess of liver, abscess of lung, and septic pyemia). The latter two cases were terminal.

The case referred to as of accidental origin is unique. The patient was a student at Indiana University School of Medicine. His past history had no bearing on the case. Interest in Stenson's duct led the student to make some scientific investigations for himself. With the aid of a mirror he inserted a bristle from a shaving brush into the opening of the salivary duct in his left cheek, but in doing so he lost hold of the bristle, which remained in the duct.

I saw the patient October 29th, five days after the bristle had been inserted. I found a swollen,

non-fluctuating mass in front of the left ear, tender to pressure. The parotid gland had a feeling of firmness. The duct mucosa protruded slightly at the papilla and was noticeably red. Purulent saliva exuded from the duct, and pus was freely expressed when the duct was stripped toward the opening in the cheek. The bristle could not be seen, nor could it be dislodged when a small silver probe was inserted into the opening. I thought the bristle might work out in the discharge. The next day, October 30th, the swelling



Schema of intracranial and extracranial venous anastomosis (according to Macewen). Pterygoid plexus communicates with cavernous sinus and internal jugular vein. Inferior palative and pharyngeal veins are tributaries of facial veins; the former returns blood from tonsillar plexus and the latter returns blood from back and side of pharynx pharyngeal plexus. Pharyngeal vein is sometimes a tributary of internal jugular.

of the gland was more marked and there was more pain about the jaw. The patient commenced to run a temperature. An attempt to find and remove the bristle by slitting the duct was unsuccessful.

On November 1st the patient entered Long Hospital, Dr. Gatch's service. The hospital record of the case shows that for four days the patient was quite sick, his temperature ranging from 101 to 103 degrees. He looked toxic. Three days later the swelling reached its peak. His left eye was swollen shut. The area of redness and swelling extended from the zygomatic process of the temporal bone down to the level of the thyroid cartilage, and from one-half inch posterior to the left angle of the mouth backward towards the ear and even back of the ear. The uvula was swollen and edematous and it was difficult for the patient to open his mouth. The opening of Stenson's duct was plugged with pus. Both staphylococci and streptococci were found in the culture of pus from the duct.

On November 3rd the white blood count reached 30,000. On November 7th the swelling subsided to some extent and the mass became softer. About this time an intern plucked the bristle from the duct. The parotid abscess was surgically drained (Hilton's method) by Dr. Gatch, and gradual improvement followed.

The surgical report of another interesting case in the Long Hospital group was presented lately by Dr. Russell Sage, at the University seminar. The case—an acutely inflamed and infected throat followed by bilateral suppurative parotitis—showed a virulent, overwhelming infection of the veins of head and neck. There developed an intense suppurative thrombo-phlebitis of the jugulars and cavernous sinus. The temperature was markedly septic, at one time reaching 106.8 degrees. The patient's course was progressively downward and she died twelve days after admission. The autopsy findings showed: temporal fossa abscess, suppurative thrombo-phlebitis of the large veins of the neck, thrombo-phlebitis of the cavernous sinus, right lateral sinus, and ophthalmic veins. (Note temperature chart No. 1.)

Dr. Shields' case, suppurative parotitis complicated with meningitis, is an interesting one. Male, age twenty nine, had lower right molar extracted. Three weeks later the left parotid gland became swollen. He was admitted to the Long Hospital in a semi-comatose condition, and his illness diagnosed as meningitis and suppurative parotitis. A spinal puncture confirmed the diagnosis of meningitis. The patient died the day after admission. Autopsy findings: acute lepto-meningitis, parenchymatous degeneration of liver, spleen, and kidneys.

The case of fractured femur followed by parotitis is also of interest. Six days after admission to the hospital for fracture, a suppurative parotitis developed. The gland was incised and drained. The patient developed septicemia, and in five days meningeal symptoms appeared, followed by rapid and progressive decline. The autopsy showed a definite meningitis.

Of the eleven cases at the Long Hospital, eight were incised and drained; five of the eleven terminated fatally.

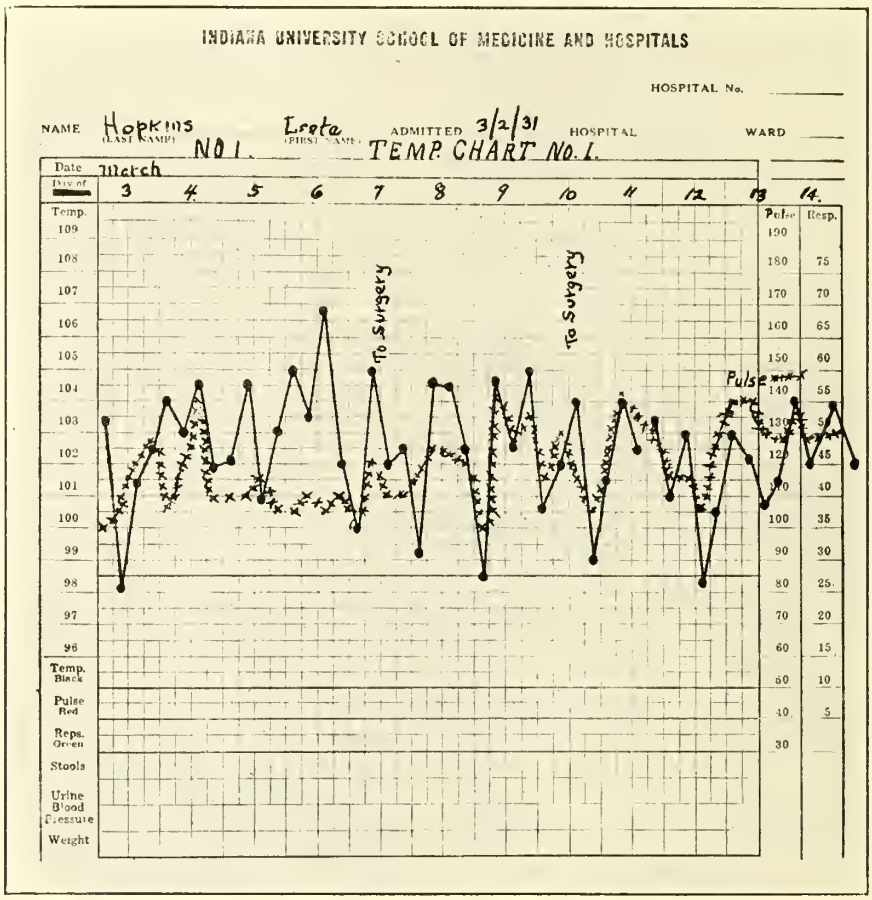
In the surgical records of the Methodist Hospital the writer found fourteen cases of parotitis treated since 1924. In this series there were: five simple cases, cause unknown; two following extraction of teeth; one due to traumatism; two that accompanied illness, and four cases that followed abdominal operations. The operations were: cholecystectomy; appendectomy and removal of cystic left ovary; two cases of appendectomy and enterostomy, in one of which the parotid abscess was incised and drained, in the other there was no surgery of the parotid; this case terminated

fatally. Of the fourteen cases at the Methodist Hospital, one was fatal. Eight cases were incised and drained.

The surgical records of St. Vincent's Hospital showed twenty-one cases of parotitis treated since 1923. Sixteen cases followed abdominal operations, four accompanied illness, and one occurred after a fractured femur. The abdominal operations complicated with parotitis were: appendectomy, four cases; appendectomy and cholecystectomy, two cases; five gynecological cases; nephrectomy, two cases; one prostatectomy; one mastoid-

I doubt if this record includes all of the cases in the three hospitals that developed parotitis after operation in the given period of years. Sometimes the major surgery engages the attention of the surgeon to such an extent that he underestimates the complication, parotitis, which is inadvertently left off the diagnostic sheet.

In reviewing the surgical records of the Indianapolis hospitals, certain facts were noticeable. The complication, pyogenic parotitis, in some cases influenced the clinical picture. My attention was called to this by a marked elevation in temperature



Temperature Chart No. 1: The case of an acutely inflamed and infected throat followed by suppurative thrombophlebitis of the large veins of the neck and bilateral suppurative parotitis. Reported by Dr. Russell Sage, of the Indiana University Hospital.

ectomy, and an exploratory laparotomy on a case of carcinoma of the liver and gall-bladder. Illness included: two cases of pneumonia, one case of quinsy, and one case of suppurative orchitis. Eight cases were incised and drained. There were five fatal cases.

The combined records of the three hospitals included forty-six cases of parotitis since 1923. Of this number twenty-four were females, twenty-two males. Twenty-four of the cases developed after abdominal operations. Of the forty-six cases, twenty-four were incised and drained. There were eleven fatal cases, a mortality rate of twenty-four percent.

and an increased pulse rate at the time parotitis developed, the case continuing a more or less septic course thereafter. I observed that a septic temperature, which appeared at onset of the parotitis and continued in evidence, presented an added significance. (Note temperature chart No. 2.)

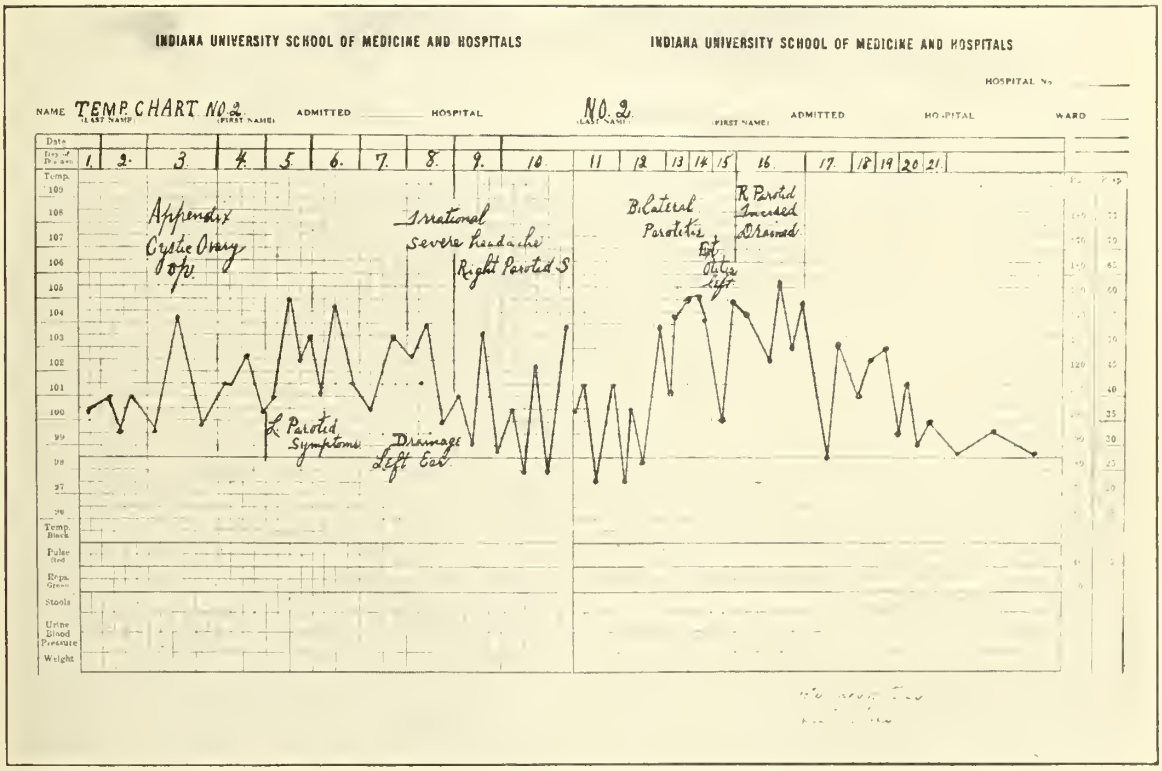
The cases that were incised and drained, especially those that were operated upon early, ran a milder course; in some the improvement commenced at once. The cases that were not operated upon ran a stormy clinical course for the most part, and in a few of these there developed a discharge from the external auditory canal.

A comprehensive report on "Pyogenic Infection

of the Parotid Gland"[3] was presented by Blair and Padgett in 1923. It includes thirty-five cases, fifteen of which were postoperative. The operations were: appendectomy, three cases; gastroenterostomy for duodenal ulcer; tonsillectomy; teeth extraction; splenectomy; cholecystectomy, two cases; and carcinoma of the breast. Five cases followed gynecological operations, and two cases developed after spontaneous abortion. Here we seem to have evidence that parotitis bears some relation to the female generative organs.

titis not plainly terminal, and in some cases it may be life-saving. 3. Meatotomy of the duct is useful in certain cases of parotitis associated with obstruction not due to stone."

Blair[4] recommends an early operation in most abscessed parotids. He thinks it unwise to delay too long, as suppuration and gangrene are prevented by early operation. The operation consists in exposing the gland, splitting the capsule, and puncturing the parenchyma for drainage. The skin incision (Blair's) is made at the angle



Temperature Chart No. 2: A case of bilateral suppurative parotitis following removal of appendix and left cystic ovary. Healing of abdominal wounds uneventful. Note drop of temperature after right parotid was incised and drained.

In the Blair and Padgett report, acute nasopharyngeal infections and pneumonia constituted the majority of cases of acute illness that preceded parotitis. It was interesting to note that most of these cases occurred during the winter months, when respiratory infections prevail. In three cases of this series there was sufficient evidence to believe that a blood-borne infection is an occasional cause of an acute suppurative parotitis, probably a streptococcus hemolyticus. In these blood-borne cases the papilla at the opening of the duct is not reddened, nor can pus be expressed from the duct.

Blair and Padgett sum up their report thus: "1. Acute suppurative parotitis is, in the great majority of cases, an ascending infection from the duct, related to decreased salivary flow, fever, and depressed general condition. 2. Early adequate liberation and drainage of the parotid gland is a safe procedure in all cases of severe septic paro-

between the ear and cheek. Starting at the lower border of the zygoma two centimeters anterior to the ear, in the direction of the duct, the incision is made along the lower border of the zygoma, toward the ear, then downward along the border of the tragus into the crease of the lobe; from here the incision extends backward behind the angle of the jaw and then forward below the jaw. When the capsule is exposed a round-nosed conical artery forcep is inserted. The incision can be extended down the neck if necessary.

Of the thirty-five cases in the Blair and Padgett report, fifteen were operated upon. Of these, three were fatal. Of the non-operated cases, seven were fatal, a mortality rate of 28½ percent.

From the medical literature on parotitis I gathered these facts: that early symptoms in post-operative cases are important—symptoms such as pain and stiffness in the lower jaw articulations.

dry mouth, swollen brown tongue, and a decreased salivary secretion; that a swollen mass in front of an ear should prompt the physician to note at once whether pus exudes from the salivary duct; that the staphylococcus aureus is the bacterium most frequently met with; that the streptococcus is usually found in the virulent types, although a few cases showed the pneumococcus; that pneumococcal parotitis is rare, but when it occurs it is a serious condition.[5]

I wish to call attention to what seems to me to be two types of infection of the pharynx which produce two different clinical pictures. I will call the types "localized" and "thrombogenic".

In the localized type, infection of the pharynx is due to bacteria which have a selective action on the mucous membrane and the underlying tissue. In this type the organism attacks from without and the infection spreads by contiguity; a peritonsillar abscess, for example, is the result of such a process.

In the thrombogenic type, infection of the pharynx is due to organisms of the hemolytic group that produce an intravenous thrombosis, the thrombus extending from a tributary vein. The organism bores from within.

The thrombogenic type is characterized by a severe acute infection of the pharynx, quickly followed by thrombophlebitis of the small veins of the tonsil and surrounding area, from which the infection may extend intravenously to the veins of the neck and to the veins in and around the parotid gland, and thence to the gland itself.

Dixon and Helwig[6] claim that thrombophlebitis of the internal jugular vein may develop as an extension of an acute overwhelming infection which has its origin in the tonsil. I am inclined to believe that a similar overwhelming infection can produce thrombophlebitis of the veins in and around the parotid gland, causing a pyogenic parotitis, from which source the infection may extend to the larger veins of the head and neck, or the infection may extend from the larger veins to the gland. However, this is difficult to prove without an autopsy. Recognition of such pathology will only come by knowledge gained in necropsy studies. This is hampered by the fact that postmortem dissections of the parotid gland are never done, probably on account of the necessity of marring the subject's face.

The thrombophlebitis of the veins of the head and neck which quickly follows the thrombogenic type of infection of the pharynx is very much like the thrombophlebitis of the lateral sinus which follows the hemorrhagic type of acute middle ear infection and acute mastoiditis, as described in Kopetzsky's "Otologic Surgery".[7]

The diagnosis depends upon laboratory aids, such as: blood cultures, early and frequent red-cell count, and percentage of the hemoglobin, because the organism of the hemolytic group thrives upon the hemoglobin of the red-blood cells. Such laboratory aids are not only a great help in diagnosis, but most helpful in treatment and prognosis.

In the fulminating cases of throat infection a positive picture of bloodstream infection, along with the clinical picture of septicemia, fairly established the diagnosis of thrombophlebitis, provided other septic diseases are eliminated.

Dixon and Helwig[6] and a few others (A. A. Boonacher[8]) ligated or resected the internal jugular vein in cases where the septic thrombophlebitis had extended from infection of the pharynx.

In the fulminating cases of pharyngeal and tonsillogenic pyemia, as just described, not only should the internal jugular vein be ligated or resected, but if the illness is complicated by a pyogenic parotitis, the parenchyma of the parotid gland should be punctured and thoroughly drained at the same time.

Irradiation by radium lately has been advocated as a treatment for parotitis. Arthur Desjardins[9], of The Mayo Clinic, states that a moderate dose of radium applied soon after the onset of parotitis caused the inflammatory process to subside, in most cases within twenty-four to forty-eight hours, and prevented suppuration. The mortality was correspondingly reduced. Rankin and Palmer[10] state that the application of radium greatly reduces the incidence of suppuration and thus markedly influences the mortality rate.

Survey of the medical literature and case records of parotitis has impressed me with the fact that there are debatable points concerning this malady. Some writers state that septic parotitis is of hematogenous origin, while others claim that it is an oral or ascending infection. If the infection is oral, does the hunger treatment, *i. e.*, abstaining from mouth feeding after operation, cause a disturbance in the secreting glandular apparatus of the mouth, thereby rendering the parotid gland more susceptible to infection? Bachrach,[11] French surgeon, so states. As a preventive measure Collins[12] advocates prophylactic oral asepsis before and after operation. Blair recommends the use of lemon drinks, chewing gum, and gentle probing of the ducts. He claims that such preventive measures will abort many of the milder cases if treated early and persistently. I have already spoken of the relation that seems to exist between the salivary glands and the genital glands. The question arises, does the sudden removal of the functioning ovarian tissues upset the balance in the internal secretion, inhibiting secretion of the salivary glands and rendering them less resistant to infection? Josephson[13] advances this theory.

Perhaps the neurologist could throw some light on the behavior of the parotid gland after operations. We know that the secretion of the gland is influenced by nerve stimuli. Can surgical shock, that produces an inhibition of the secretory and trophic fibres from higher psychic centers, cause a postoperative parotid involvement? Fisher[14] advances this theory.

"Suppuration not easy to recognize" is a statement encountered in a number of the abstracts.

Fisher[14] says that the surgeon must not count upon finding fluctuation because, owing to the very close texture of the parotid gland, the pus infiltrates into the glandular tissue, creating multiple pockets, and only exceptionally collects.

In suppurative parotitis consecutive to operation, is an early incision recommended in all cases? It is so recommended by LeDentu,[15] French surgeon, who says that the revealing of the suppuration ought not to be awaited; besides, it is difficult to elicit fluctuation early because the capsule over the lower half of the gland is tense and nonyielding.

This paper is presented because of my interest in the subject of parotitis, and to focus attention upon a malady concerning which little has been written in otolaryngological literature and textbooks.

Discussion

W. D. Gatch, M.D. (Indianapolis): I had the opportunity of reviewing Dr. Layman's paper before this meeting. Dr. Layman has gone into his subject very thoroughly and I know he has looked up and covered all the available literature.

His remarks as to the frequency of this condition are well taken. It is certain that forty-five cases at the Methodist, University, and St. Vincent's hospitals is a ridiculously small number. Personally, I see five or six cases every year, and I am certain the frequency of this disease is greater than the statistics would indicate.

The etiology, as he mentioned, is of two sources —local and hematogenous. It seems to me the two routes are not mutually exclusive, and I believe that most of the cases are due to local infection. I believe that some are part of a general septicemia. The case he reported of parotitis after the introduction of a bristle is unique. Keeping in mind the difficulty of locating the stoma of the duct by trained operators serves to make the procedure on the part of the patient nothing short of remarkable.

I think we can do something in prophylaxis. Its frequency is such as to make it incumbent upon us to do something to prevent the occurrence of suppurative parotitis. One cause is trauma to the jaw, and in this connection one should bear in mind the possible trauma to operative cases by pressure of the anesthetist's hand in giving the anesthetic. Another important cause is the diminished secretions in the mouth following operation. Dehydration, with its accompanying stasis of the gland's function, provides an opportunity for this complication. It is for that reason that I take the precaution to give my patients a sour mouth wash to stimulate secretion of these glands, usually glycerin and lemon juice.

In considering the outlook and complications, these cases will fall into two groups: First, women with postpartum sepsis; patients with generalized septicemia, or with virulent infections about the head in whom we expect death. I believe death in these cases should not be attributable to parotitis. Second, ordinary, postoperative parotitis, in which the death rate has not been very high. These usually run a benign course and sometimes subside without suppuration.

I have seen but one case of facial paralysis in parotitis. A girl was operated upon for appendicitis, followed by pelvic abscess and intestinal obstruction, for which an enterostomy was performed. She finally developed a parotitis complicated by facial paralysis, from which she recovered in about three months.

I believe it is a mistake to open any infected field until pus has formed. This is especially true in parotitis. The parotid gland has some very important anatomical relations. I always wait until I am sure there is pus, then under local anesthesia make a small incision by Hilton's method and drain.

F. C. Walker, M.D. (Indianapolis): There are certain things which stand out in this paper. The condition is rather uncommon and is about equally distributed between the sexes. That has been corroborated in other articles. It is a very serious condition. It may be unilateral or bilateral, and may occur following any operation on the body.

I note that part of the cases reported were associated with gynecological conditions. Some writers believe this complication is more common when the ovaries are involved. There may be something in that. There is a definite relationship between mumps and orchitis. Pregnant women often have salivation, and many women are salivated during menstruation.

There seems to be some debate as to how the infection gets into the gland. When we consider the many filthy mouths which come to surgery it seems remarkable that we do not have more. Trauma has something to do with it. Drying of the mouth, especially with overdoses of atropine, also has its part to play. However, I think some of the infection must come to the gland directly from the bloodstream from some other point.

I have had four cases in the last ten years, with two deaths. One had a bad pelvis and developed a bilateral parotitis; one had an infection following drainage of a pelvic abscess; one followed an appendectomy, and one followed a hysterectomy. The symptoms occur in one week to ten days and come on quickly. Many show up over night with one or more chills and temperature. The swelling appears and the diagnosis is easy.

I usually feel the prognosis is rather bad. We should direct our attention to cleansing of the mouth, providing acid mouth washes to promote an outward flow from these glands. It has always seemed to me best to drain when there is much swelling. Operative procedure early would be the proper method to pursue.

E. D. Clark, M.D. (Indianapolis): I have had several cases and recall the last one. I feel certain it was due to trauma produced by the anesthetist,

since I observed a discoloration in the region of the parotid gland within an hour or two after the patient was back in bed.

My experience has been that of Dr. Gatch—that it is not such a serious matter. I always operate these cases when there is pus, through a small incision. I have never found it necessary to make such an incision as shown in the picture. This condition occurs frequently in typhoid and other lingering illnesses. In such cases it is extremely serious as it is usually a terminal affair.

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THE VALUE OF SODIUM AMYTAL IN THE TREATMENT OF TETANUS

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It has been felt that, in severe cases of tetanus, the continued and relentless punishment of the convulsions on the central nervous system has so weakened and drained the individual that the antitoxin has not the time or foundation for its greatest efficiency. In all such cases the appearance of convulsions has been the immediate forerunner of prognostic pessimism and from that moment thoughts turn toward the comfort of the patient, with little hope remaining regarding the final outcome. In the past it has been almost impossible to produce sedation even by the use of the most powerful drugs.

It is true that patients suffering from tetanus recover and that there is, of course, a considerable variation in the severity of the symptoms. This variation is probably due to the virulence of the organism and it has been said that the period of incubation is the best indicator at our disposal. However, one may venture the statement that the appearance of convulsive seizures may be viewed with the greatest alarm. The presence of severe generalized convulsions in the cases cited below unquestionably places them in severe group and it is because of immediate and absolute control of the attacks by the use of sodium amytal that this report is submitted.

Case No. 1. The patient was admitted to the Riley Hospital, August 11, 1930, complaining of (1) inability to open his mouth, (2) walking with legs stiff, (3) generalized convulsions.

Present Illness: August 7, 1930, the parents noted that the child had a peculiar facial expression. His lips were drawn laterally and upward. His eyes had a peculiar expression, rolling upward. The patient was unable to open his mouth and his legs were stiff. The symptoms became more aggravated and the day before admission the patient had several generalized convulsions.

Personal History: The boy had had frequent headaches. August 4, 1930, the patient fell and hit his head on the root of a tree. He was also hit in the back by a swing. At this time also the patient had a wound on his left foot which discharged pus and was treated at home by the mother, who applied hot packs to the foot. On the date of admission the wound was completely healed.

Past history and family history are irrelevant.

Physical Examination: Head—normal in shape and size. Eyes—pupils equal and accommodate to light. Mouth—patient is unable to open his mouth more than one-half inch. Neck—very rigid. Thorax—both lungs normal. Heart—normal, no murmurs. Abdomen—abdominal muscles extremely rigid, no masses present. Extremities—the legs are extremely stiff. Kernig's sign positive. Reflexes hyperactive, bilaterally. A scar was present on the back in the region of the fourth lumbar vertebra. A scar was also present on the left foot.

The boy was not irrational, could talk, and his only complaint was that he could not open his mouth. Spinal puncture was done and the fluid was found to be clear and under normal pressure. Cell count 90. Trace of globulin present. White blood cells 8,700. Red blood cells 4,500,000. A diagnosis of tetanus was made. The patient was immediately given 20,000 units of tetanus antitoxin intramuscularly on admission. At this time the patient did not show much of a tendency to go into convulsions. At 2:00 o'clock the next morning after admission the patient had a convulsion and was immediately given three grains of sodium amytal by mouth. The convulsions were very well controlled following this administration. The patient cried out quite frequently with pain in his legs and back every time some little noise startled him. On August 12, 1930, a cork was so arranged that it could be slipped between the patient's teeth so that he could be fed and would not bite his tongue. For the first two days the patient refused all diet. He was given 20,000 units of tetanus antitoxin intramuscularly and a spinal puncture was done, thirty cubic centimeters of fluid being withdrawn. August 13, 1930, he had a convulsion about two in the morning. He was given two grains of sodium amytal by mouth. The convulsions were controlled. On August 14, 1930, the patient was given 20,000 units of tetanus antitoxin. On August 12, 1930, the patient re-

ceived sodium amytal to control the convulsions. At 9:00 a. m. three grains and at 3:00 p. m. three grains and at 7:00 p. m. three grains. The patient also received 40,000 units of tetanus antitoxin that day. On August 15, 1930, the patient received twelve grains of sodium amytal by mouth. Convulsions were controlled. Was given 40,000 units of tetanus antitoxin. He was also given normal salt solution and glucose intravenously. On August 16, 1930, the patient received six grains of sodium amytal by mouth, also whole blood transfusion 220 cubic centimeters; also one and one-half grains of codeine and 40,000 units of tetanus antitoxin. On August 18, 1930, the patient received nine grains of sodium amytal and 40,000 units of tetanus antitoxin. August 19, 1930, the patient developed serum sickness. He was given six grains of sodium amytal and four drops of adrenalin q 4 h by hypo. August 20, 1930, the patient received six grains of sodium amytal, no serum. August 21, 1930, the patient received no amytal. August 23, 1930, three grains of sodium amytal was given. August 24, 1930, three grains of sodium amytal was given by mouth. The patient began taking a soft diet on August 21, 1930, and progressed very rapidly. The patient showed a tendency to go into convulsions whenever the door was opened or at the slightest sound. We continued the medication of sodium amytal, which relieved the tendency to convulsions. He was kept under the influence of a drug most of the time, being asleep most of the twenty-four hours.

The patient was furloughed September 5, 1930, and returned to the outpatient clinic one month later at which time his only complaint was some stiffness of the leg. Laboratory findings, spinal fluid sugar 50. White blood cells 8,700. Red blood cells normal. Spinal fluid culture negative. Wassermann negative. Spinal fluid Wassermann negative and gold curve negative.

Case No. 2. Mrs. F., age thirty-five years.

This lady was seen in consultation with Dr. J. J. Littell August 17, 1930. She had seen Dr. Littell August 12, 1930, complaining of stiffness and soreness of the throat. There was no evidence of severe pathology in the pharynx or on laryngeal examination, but in spite of palliative measures the symptoms increased. On August 16, 1930, she was seen again and at this time some rigidity of the neck and jaw muscles was noted and she was immediately sent to the St. Vincent's Hospital. The provisional diagnosis was tetanus and she was given 10,000 units of antitoxin. The history of the part of infection was rather vague. According to the patient, she had had a burn on her foot about ten days previous and it was felt that this was the probable port of entry.

When seen on August 17th she presented the typical picture of acute tetanus with marked muscle rigidity, tense facies and severe motor irritability. The muscles of the neck and face were particularly spastic. She was entirely conscious but very uncomfortable. She stated that the pain in the head and neck was almost unbearable and she was breathing shallowly and with some effort. She exhibited marked irritability to any sensory stimulus.

Except for moderate dilatation of the pupils, the neurological examination showed no evidence of pathology in the cranial nerves. There was a generalized spasticity with positive Babinski, Gordon and Hoffman bilaterally. Temperature was 101.

Laboratory reports were: White blood cells, 11,400; spinal fluid cells, 5; globulin, negative.

She was given during the first twenty-four hours 70,000 units of antitoxin, 40,000 intramuscularly, 20,000 intravenously and 10,000 intraspinally. However, there was very little change in her condition and at about 11:00 a. m. August 18, 1930, she had a severe and generalized convulsion. She was immediately given fourteen grains of sodium amytal intravenously and passed into unconsciousness from which she could be aroused by any moderate stimulation. Following this she was given 30,000 units of antitoxin, 10,000 units intravenously, 10,000 units intramuscularly and 10,000 intraspinally. Her temperature reached 103.4 during the day. The following day the patient stated that she felt better and was able to open her mouth slightly, as well as take a considerable quantity of liquids. During this day she received six grains of sodium amytal by mouth and 20,000 units intramuscularly and 10,000 units intraspinally. The spinal fluid at this time was very cloudy and was considered to be due to the antitoxin—a true serum meningitis. On the 20th she received six grains of sodium amytal by mouth and only 10,000 units of antitoxin intramuscularly. Her improvement was so marked and so continued that it was decided no further antitoxin was needed and the following day the sodium amytal was omitted. The temperature was normal by the 23rd and at that time only the neck muscles and the masseters showed any spasticity. The subjective complaint of neck rigidity persisted after the patient left the hospital, on the tenth day, but later even this subsided and a recent report from the patient states that she feels well in every way.

Case No. 3. C. M., age eleven years, was admitted to the Riley Hospital on April 28, 1931, complaining of rigidity of the neck, back and lower extremities, some rigidity also present of the arms. Rigidity of the muscles of mastication. Two weeks previous to admission the child ran a nail into her left foot. No notice was taken of this wound and no prophylaxis was given. About three days previous to admission the patient began to become spastic and complained of difficulty in walking. She was unable to place her heel to the ground and was walking on her toes. Up until the date of admission the patient had had no convulsions.

On these findings a diagnosis of tetanus was made. Physical examination revealed the lower extremities to be spastic, more marked on the left.

The feet were extended, the knee jerks were present and hyperactive. The Babinski was one-plus. On the sole of the left foot just below the ball of the foot there was an old puncture wound. There was considerable rigidity of the trunk muscles and neck, the patient could not open her mouth over three-fourths of an inch. The child was immediately sent to the ward and 20,000 units of tetanus antitoxin was given intramuscularly, 20,000 intravenously and 20,000 intraspinally. The spinal fluid pressure was increased, cell count was 50, the Pandy was negative. Four hours after treatment the patient looked much worse and began having typical tetanic convulsions. Ankle clonus was marked. The risus sardonicus was marked.

The patient was given sodium amytal, grains five, intravenously and sodium amytal, grains three, by mouth. The sodium amytal served to relax the patient completely, and following its administration she had no more convulsions.

At 8:25 on the evening of admission the patient was a little restless, so that sodium amytal, grains four, was administered by mouth, and the puncture on the left foot was opened and curetted and treated with peroxide the day following admission, April 29, 1931.

Sodium amytal was administered by mouth in three-grain dosages three times in twenty-four hours, and was sufficient to control all convulsions. On the third day after admission, April 30, 1931, it was necessary to administer sodium amytal only once in 7½-grain dosage intravenously, to completely relax the patient and to control all convulsions. On May 1st it was necessary to give sodium amytal, grains 7½, by mouth two times in order to completely relax the patient and to keep her free from convulsions. The patient then began showing marked improvement, so that on May 3, 1931, it was no longer necessary to administer sodium amytal, the patient began to relax and on the day of discharge, May 21, 1931, the patient was in excellent condition. The only residual was the fact that the patient walked on her toes; the rest of her musculatures were relaxed completely. Temperature was normal and the patient was apparently in excellent condition. On April 29, 1931, 20,000 units of tetanus antitoxin was given intraspinally, and on April 30, 1931, 20,000 units of tetanus antitoxin was given intraspinally. No further antitoxin was given.

Case No. 4. A. W., age seven years, was admitted to the Riley Hospital on May 8, 1931, complaining of a boil on the left elbow and generalized muscular rigidity. Four days previous to the admission to the hospital a boil on the left elbow was opened with a non-sterile needle. On the morning of admission the patient developed a generalized muscular rigidity with a painful and stiff neck. She was immediately brought to the hospital.

Physical examination revealed a generalized muscular rigidity, involving both lower and both upper extremities. The abdominal muscles and muscles of the back were spastic. There was some spasticity of the muscles of mastication. A boil was present on the left elbow. The neck was rigid and the reflexes were hyperactive. A diagnosis of tetanus was made. The patient was sent to the isolation ward and was given 20,000 units of antitoxin intraspinally and 20,000 units of antitoxin intramuscularly. While doing the spinal puncture the patient had a typical tetanic convulsion. Sodium amytal, grains three, was immediately administered by mouth, which controlled the convulsions. No further convulsions were observed and the patient relaxed under sodium amytal therapy. The following day it was necessary to give sodium amytal, grains three, by mouth with the same result. On this day 20,000 units of tetanus antitoxin was given intraspinally; the first day after admission three grains of sodium amytal were given by mouth, which controlled the patient. No convulsions were observed, the patient slept continuously and was relaxed. Sodium amytal was administered in three-grain doses by mouth once or twice a day for five days after admission. Tetanic convulsions were noted only on the first day of admission. Sodium amytal controlled this patient's convulsions and gave complete relaxation. The patient was comatose continually while under this therapy. Spinal fluid examination was negative. The patient is in excellent physical condition, and there is practically no rigidity of the extremities, trunk, abdominal muscles or muscles of mastication remaining.

Conclusions:

1. Sodium amytal, either orally or by intravenous injection, is a valuable adjunct in the treatment of tetanus.

2. It is believed that this drug prevents the exhaustion attendant upon the repeated convulsive attacks and allows the antitoxin an opportunity to act.

3. This drug should be used early in the condition and continued until the motor irritability is overcome.

4. It is not thought that all cases of tetanus can be handled so easily and satisfactorily, but that this drug may simply be an aid in combatting this infection.

SURGICAL IDEAS FROM EUROPEAN CLINICS

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I have just returned from Europe where I picked up several surgical ideas which were new to me and which are apparently of considerable practical value.

In Vienna I was interested particularly in the work of Dr. Lorenz Boehler, who is chief surgeon of the Workers' Accident Hospital, an institution devoted largely to the treatment of industrial accidents the majority of which are fracture cases.

Dr. Boehler first became recognized on account of his work in the reduction of fractures of the long bones under local anesthesia. He injects about ten cubic centimeters of a two-percent solution of novocaine into the hematoma about the site of the fracture, and in a few minutes has an anesthesia together with muscle relaxation which lasts about two hours. The fracture is reduced and an x-ray plate made immediately. If the position is not satisfactory, further corrections are made until the best possible correction is obtained. A patient with a simple fracture of a phalanx of a finger had five manipulations, each checked with x-ray, until the doctor was satisfied. During this period the patient seemed perfectly comfortable and did not object to the manipulations in the least.

Another procedure that looked practical was the application of plaster bandages directly to the skin. This makes a very positive form of fixation in cases of fracture, as there is no soft padding to become displaced or packed down, and also on account of the plaster becoming adherent to the hairs of the skin, which also adds to the stability of the fixation. In removing these contact plaster casts the skin is in perfect condition except being minus hairs. The doctor emphasizes the fact that these casts must be applied with absolute evenness. He first applies a wet splint along the length of the limb. After this has partially hardened he then applies a circular plaster bandage. I believe that if we learn to apply this method we will avoid angulation and over-riding of the fragments that is often so annoying.

Another very practical procedure is his method of handling fractures of the tibia occurring below the middle of this bone. After reducing the fracture a cast is applied extending to the knee, in which is incorporated a U-shaped steel band which extends about one-half inch below the heel of the cast. The steel, plus the upper part of the cast, serves as a socket about the calf muscles similar to that of an artificial leg. This allows the patient to walk about very early with the aid of a cane only. Patients with Pott's fracture are walking within forty-eight hours, and those with fractures higher up walk within two weeks as a rule. This is of great economic value, as it reduces very materially the period of hospitalization.

Most infected wounds were treated without any form of dressing except a mosquito net to keep off the flies. This did not appeal to me at all, but the doctor insisted that these wounds healed faster than when dressings were applied. To see a limb covered with layer upon layer of dried pus, with fresh pus issuing from cracks in this dried material and dripping in a basin below was rather offensive. Even if this open method of treating infections is superior, I doubt if we could make our patients stand for it, as most of them want their "sores" wrapped up.

The doctor had one very good trick in the treatment of infections of the hand and forearm. In all such infections such as cellulitis, palmar abscess, compound fracture of the fingers, etc., he kept the arm elevated to the level of the shoulder by means of a modified aeroplane splint. This reduced the venous congestion, which in turn reduced the swelling and allowed active movement of the fingers, thumb, and wrist at a much earlier period. These patients also seemed very comfortable. The doctor claims that this procedure greatly reduces the stiffness of the joints following hand infections, and I feel that we should give this simple method a trial.

My impression was that Dr. Boehler is a real genius and a wonderful mechanic in the treating of fractures. He has written a small treatise, which has been translated into English, on fracture treatment.

In Paris I was interested in seeing the work of Dr. Thierry de Martel. I had heard of him as the leading French neuro-surgeon and was very much surprised at my first visit to see him perform an hysterectomy. I later learned that he is the leading general surgeon of Paris, his brain surgery being an additional accomplishment. I have met few surgeons who have impressed me so favorably. In every type of operation that I saw him perform his surgical handicraft was perfect. I was especially interested in his use of the Reverdin needle in abdominal operations. This is a needle and handle combined, with a split eye about one-fourth inch back of the point. The ease and precision with which this was manipulated makes our suturing with needle and holder seem very clumsy. The doctor had several sizes and types of these needles and used them throughout his abdominal operations with the exception of the skin, where he used metal clips. I believe that we are missing a good technical procedure if we do not learn to use these needles.

I saw the doctor perform two craniotomies, and his technique compares very favorably with our own masters in this field. He had a few "tricks" which seemed to be a marked improvement on the methods used over here. In controlling the bleeding from the scalp, instead of using a large number of closely applied hemostats, he uses a series of special clamps, each one wide enough to pick up about one-half inch of the cut edge. The clamp is very "springy", so that it presses just enough to stop bleeding, but not enough to injure the tissues of the scalp. This method is quicker and also reduces to about sixty percent the number of clamps in the operative field.

One of the difficulties that we encounter in opening the skull is that the weight of the hemostats on the edges of the skin flap often pulls the scalp away from the underlying bone. Also, these flap hemostats are often in the way when the flap is turned back. The doctor has a very clever method of meeting this difficulty. As soon as the scalp incision is completed he sutures a rubber tube about one-fourth inch in diameter to the cut edge of the flap with running sutures. This tube presses on the cut edge of the scalp, producing a perfect

hemostasis and enables him to dispense with all clamps on the flap. When the operation is completed this tube is loosened a short distance at a time as the scalp is being sutured.

The first time I went to see Dr. de Martel perform a brain operation I saw in one end of the operating room a narcotized pigeon strapped to a board with its breast feathers all carefully removed. The doctor said that after a series of experiments he had found that the breast muscle of a pigeon was the best known hemostatic material. We have known for some time that human muscle was an excellent material to stop bleeding that was otherwise uncontrollable in the brain or dura. Small pieces of temporal muscle is generally used, but at times this is not sufficient and we have to remove a larger piece from the patient's thigh or abdomen. This takes time and is also embarrassing to have to explain to the patient why we had to make an incision into his leg in order to remove a brain tumor. With the use of pigeon muscle we have an abundant supply of material, and its action is quicker and more positive than with human muscle. I feel that this method may be of great value in controlling oozing in other regions besides the brain. Often we encounter embarrassing oozing in an operative field that we wish to close without drainage or packing, such as in operations for separation of adhesions in the abdominal or pleural cavities, plastic operations on the bones, and in many conditions where we fear the formation of an hematome in a "dead space". In all such instances it seems to me that the use of the pigeon breast muscle would be ideal. The doctor intends to publish a paper dealing with this subject in one of our journals in the near future.

Like many other Americans I always have felt that we were the last word in surgery. Perhaps we are in the majority of instances; nevertheless, this recent experience has convinced me that we still can learn quite a few good points from our foreign colleagues.

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SOME REFERRED AND REFLEX EYE DISTURBANCES*

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TERRE HAUTE

There is no part of the human body where referred pain is more frequently manifest than the head. This is on account of the close inter-relation of the three branches of the fifth cranial nerve, the trigeminus through the Gasserian ganglion.

Pain in any part of the head is relayed to the brain through the sensory fibers of some part of this nerve. On account of their connection through the Gasserian ganglion the patient often feels the pain at some portion of the fifth nerve remote from the diseased area. In this case we are dealing with a referred and not a reflex disturbance.

In a reflex disturbance the sensation passes from the diseased area over an afferent nerve, through a ganglion, then over an efferent (secretory or motor nerve) to the part where the symptoms are manifest. Reflex disturbances are comparatively rare as compared to referred disturbances about the head. The most common reflex disturbance is tearing which may be caused by disease or irritation in any part supplied by the fifth cranial nerve. The most common cause, however, is irritation or disease of the nasal mucosa. While I have never observed such a case, Ramsey reports a case of reflex ptosis in which a cure speedily followed the extraction of a decayed molar tooth.

For some reason that I am unable to explain these disturbances produced by pathology in any part supplied by the fifth cranial nerve seem to be referred in the majority of instances to the area supplied by the ophthalmic division. That is, the patient complains of some eye disturbance or at least pain in the region of the eyes which he associates with the use of the eyes or eye strain.

This is probably due to the fact that the delicate nerve mechanism which controls accommodation and convergence, being a late biologic acquirement, is necessarily more easily affected by pathologic disturbances. Whether this is true or not I am unable to say, but I am sure that most of us will agree that head pains, as a rule, are referred to the region of the eyes. As it is the oculist that sees these cases more frequently than the average physician, they are of peculiar interest to him.

While I haven't statistics to support my statement, it is my opinion that half of the patients that come to me for the relief of asthenopic symptoms have some form of reflex or referred pain or disturbance.

The most important factor in arriving at a proper appreciation of a case of this nature is a careful history. Most of these cases come to the oculist because they think they need glasses, and the oculist should remember that he is not going to build up much of a reputation by fitting glasses on this class of cases.

Ethmoiditis. One of the most common forms of referred eye disturbance is that caused by an acute or chronic ethmoiditis either anterior or posterior, the posterior being usually chronic and the anterior acute or sub acute. In these cases there is usually some headache or pain about the eyes which is aggravated by use of the eyes for close work.

If the posterior ethmoids are affected there is frequently occipital pain on the same side. The patient also frequently describes the pain as being deep in the head, back of the eyes. If the anterior cells are affected the condition usually is readily diagnosed by inspection.

*Presented before the Indiana State Medical Association at the Fort Wayne session, September, 1930.

Also tenderness over the frontal sinus is rarely absent in these cases. Less frequently these cases show slight congestion of the conjunctiva on the side affected with moderate tearing and photophobia. Most of these cases are readily relieved by appropriate nasal treatment.

Teeth. Next in frequency in my experience is the eye disturbance due to diseased teeth. In one class of cases there may be no definite pathology, but symptoms are due to pressure from the third molars during the process of eruption.

These cases due to the third molars may extend over a period of several years. Many of these patients have had three or four pairs of glasses fitted and are still trying to find someone that can fit their eyes properly.

A careful history of cases is usually sufficient to start one on the right track. The sufferers are usually students from eighteen to twenty-five years of age. If these cases do show a mild hyperopia or astigmatism, it is useless to give them their correction and expect relief from the symptoms.

The youngster who has attended school regularly and had no eye disturbance, as they will tell you, until recently is not suffering from a refractive error, but has some form of reflex or referred disturbance which causes his asthenopia. It is my practice to look first for reflex or referred disturbance in all individuals between sixteen and twenty-five years of age who come for the relief of asthenopia symptoms unless the vision is below normal.

Nasal Pressure. While abnormal nasal topography usually leads to frequent colds and complicating sinus disease with its many sequelæ, conditions which I am not attempting to discuss in this paper, there is one class of cases which I observe rather frequently that I think deserves mention here—that is the nose that on casual inspection appears to be perfectly normal. Often complete absence of colds with no evidence of infection—the patient has no refractive error, or if so is wearing the proper correction. Yet the individual is unable to use the eyes for close work on account of pain. In many cases of this nature I have found on careful examination that one or both middle turbinates are in contact with and are pressing on the lower turbinate. If there is room in the nose to do so, fracturing the turbinate in towards the septum will relieve the symptoms; if not it is usually necessary to remove a portion of the posterior lower border of the turbinate.

Conditioned Reflexes. The conditioned reflexes are probably more common in the eye than we suspect. In dealing with the conditioned reflex, consideration must be given to the response mechanism of the individual, which may be divided roughly into three parts: the receptors or afferent nerves, the nervous system, including the brain and spinal cord and the effectors or efferent nerves. The conditioned reflex differs from the common reflex in that the nerve centers above the cord are involved.

The basic principle of the conditioned reflex lies in the fact that when more than one stimulus is repeatedly applied simultaneously the individual may eventually through habit learn to respond to stimuli that originally had no effect.

This is best illustrated by the experiment of Carson, who was able, after repeatedly flashing a light before the human eye and ringing a bell at the same time, to cause the pupil to respond by contraction to the ringing of the bell alone. If the human pupil can be made to respond to a new stimulus after its millions of years of response to light and accommodation only, we can surely do something to overcome the unfavorable conditioned reflexes that have accidentally been established by the habits of the individual.

We should recall that conditioned reflexes are both detrimental and beneficial. In case of conditioned reflex that is detrimental a cure is brought about by establishing an antagonistic one or one that inhibits the former reflex.

One of the most common illustrations of detrimental conditioned reflex is that caused by uncorrected astigmatism.

When the astigmatism is corrected, new reflexes conditioned by correct visual impressions are formed. These are antagonistic and prevent or inhibit the detrimental ones. Many of these patients will at first have more distress when wearing their correction than they did with the original uncorrected astigmatism. And unless they are previously warned that they are liable to have some trouble learning to wear the glass, they will not wear them long enough to establish the proper reflex which gives them eye comfort.

Another very common detrimental conditioned reflex is that caused by children establishing the habit of reading with the print too close to the eyes. In early life they have sufficient accommodation to enable them to read satisfactorily at eight or ten inches. As they become older and accommodation is decreased they are unable to read at the usual distance and must establish proper reading habits to relieve the condition—that is, the eyes must respond to visual impressions in a different way. They must form a new and more favorable conditioned reflex.

The practical significance of the conditioned reflex in refraction with particular reference to asthenopia can be illustrated best by a case report:

Mr. R. F. N., age fifty, 1921.

History: Patient has never worn glasses. Was fitted five years ago, but could never wear them. Old lenses are: right, plus 1.00, ax 60; left, plus 1.00, ax 120. Patient says that he has been having some headaches lately, but does not want to wear glasses all the time. Objected to homatropine.

Manifest:

R = 20/100 minus 75 ax 90 = 20/30

L = 20/80 minus 75 ax 60 = 20/25

Treatment: Patient was given plus 1.50 sphere for reading only. He wore these lenses until 1923

with perfect satisfaction, when they were replaced by plus 2.00 spheres.

He is fifty-nine at present and is wearing the plus 2.00 spheres for reading only.

In this case we have a well-established conditioned reflex which was best left alone. The asthenopia was due to his presbyopia and not the astigmatism.

We should remember that conditioned reflexes are often formed in connection with eye strain and that these are sometimes best corrected and sometimes best left alone. The decision in cases of this kind is often difficult to make, but a careful history of the patient is of more importance than the degree of error or its nature.

Case illustration: Mrs. E. M., age fifty-two.

History: Patient has had present glasses one year. They were never satisfactory. Has tired feeling in both eyes for past six weeks; lids seem to droop; eyes ache; no halo; wearing for near.

R plus 250
L plus 250 ( ) plus 50 ax 180

Manifest:

R plus 25 combined with plus 50 ax 180 = 20/20
L plus 25 combined with plus 50 ax 180 = 20/20

add plus 250 for near.

Three centrads of exophoria for distance. Orthophorca for near.

Treatment: This patient was given her correction in Kryptoks—she would not wear them. She should have been given a plus 2.50 sphere in each eye for reading only.

Case Reports:

Miss A. S., age twenty-three, April, 1929.

History: Patient has been attending University of Chicago. Has had headache for the past six months—not severe but always aggravated by use of the eyes. Patient had been advised to give up her school work and told she had nervous prostration due to overwork.

Examination: Tonsils have been removed. Teeth in good condition. Nose appears O. K. After shrinking the nasal mucosa the right middle turbinate proved to be enlarged below and was very close to the lateral wall. The left middle turbinate was small but very close to the lateral wall. There was no nasal secretion and no evidence of infection. Transillumination was negative. No tender points on pressure.

Treatment: Dowling was attempted, but proved unsatisfactory. Patient returned the next day without any improvement. Both middle turbinates and the ethmoid region were thoroughly anesthetized with powdered cocaine; both middle turbinates were fractured in by forcing a heavy, smooth submucous dissector between the turbinates and the lateral wall. Cotton pledgets saturated with ten-percent argyrol were packed tightly between each turbinate and lateral wall.

These were removed the next morning. Patient was much improved as soon as the packs were removed. Patient remained free from headache for the next ten days, after which she returned to her school work.

Patient was seen about six months ago—had had no return of trouble.

Mr. C. O. T., age forty, September 26, 1925.

History: Patient has had pain about left side of face and left eye for six months. Had one tooth extracted two months ago. He thought he got some temporary relief. Has been unable to work for several months on account of pain. Says that he gets temporary relief from pain by blowing his nose. Thinks pain is more severe lately than ever before.

Examination. Septum deflected to the right. Slight tenderness over the left antrum. Transillumination negative. There was a rather prominent bulla ethmoidalis on the left side, a dry nose, no congestion, plenty of breathing space on both sides. When applying cocaine to the region of the bulla patient complained of pain in the left occipital region.

Treatment: After cocainization the bulla was punctured with an ordinary nasal applicator. A thick, yellow pus exuded from the opening.

The cell was then freely opened with a currette. Patient returned September 28, 1925, claiming he had been free from pain ever since.

This patient was seen again September 6, 1930; has had no recurrence.

Genevieve H., age eighteen, February 21, 1927.

History: Eyes have been congested most of the time this winter. Headache every day. Begins about two hours after patient gets up. Made worse by use of the eyes for close work.

Wearing:

R plus 1.00 ( ) plus 50 ax 90
L plus 1.00

Examination: Throat and nose O. K. Marked congestion of the conjunctiva. Left lower third molar in process of eruption.

Treatment: Patient was referred to dentist, who found both lower molars infected and impacted. They were extracted, with relief of the eye disturbance and headache.

Discussion

Byron N. Lingeman, M.D. (Crawfordsville): This is another bread-and-butter paper; it has to do with the proper fitting of glasses, in which most of us are interested. There are just two points I would like to emphasize. One is that the physician who is fitting glasses should first of all be a physician. In other words, he must many times look for things outside of the refraction for the cause of the patient's symptoms.

The second is that I am impressed with the large number of patients who come to the ophthalmologist firmly convinced that they need glasses, and sometimes it is pretty hard to talk them out of it. You refract them and find they have a very small error of refraction, and then you have to

(Continued on page 514)



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1931

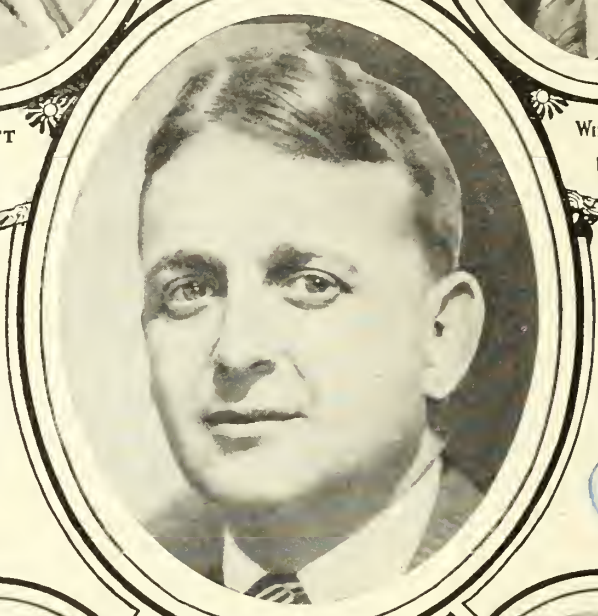
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B. G. KEENEY
CHAIRMAN SECTION ON MEDICINE
SHELBYVILLE

THE INDIANAPOLIS SESSION

The Indiana State Medical Association will hold its annual session in Indianapolis, September 23, 24 and 25th.

There is an ancient wheeze having to do with mail carriers who take a walk on their holidays, and bus drivers who go for a ride. The Association probably was thinking of a similar eccentricity on the part of medical men when it chose Indianapolis for its 1931 session, for there is no place in the state where such a whim could be indulged without exhaustion of material as in the Capital City. For the physician or surgeon who likes to get the smell of ether out of his nostrils for a brief period, there are things of beauty and points of interest in and about Indianapolis to please him, and there are attractions in Indianapolis to make the physician forget the ills of humanity and perhaps even the present economic depression.



Richard Wynn Spencer Owen, M.D.
Chairman Arrangements Committee
INDIANAPOLIS

The Association has not met in Indianapolis for four years, and that is almost an era in medical development considered in the light of modern rapidity. The Indianapolis City Hospital, for instance, will be scarcely recognizable to those who have been prevented by distance of journey or intensity of occupation to visit it since the last convention. Additions to the plant are in themselves equivalent to giant institutions. Only a few months ago dedication ceremonies were held for the new out-patient building and research and dispensary departments. This unit was constructed at a cost of approximately $700,000. It embodies the most modern developments in the handling of patients, particularly indigents. The research department, maintained by Eli Lilly & Company interests, is an enlargement of equipment for men who have done important work in recent years. For those interested in physical modernity in hospitals, the new $530,000 power plant and laundry will be educational. The hospital is served by a staff of one hundred fifty surgeons and physicians, who contribute their training and education. Twelve specialties are represented. The hospital has 550 beds, and by reason of its place in the community, has the greatest ambulance service for emergency work. In recent years the hospital has taken a place among the best city hospitals in the country.

It is almost superfluous to tell members of the Association that the Indiana University Medical Center is one of the finest in the nation. Its three large units represent the most important branches of the profession. The Robert W. Long unit has its various divisions of medicine and surgery. The William H. Coleman unit is unique for its modern method of caring for maternity cases.

The James Whitcomb Riley Hospital for Children is nationally famous. If there is any physician in the state who has not made a thorough inspection of this institution he should make it a point of his visit to do so while in Indianapolis. At the time of the session another unit, the Rotary Riley Convalescent Home, will be nearing completion, and this $250,000 structure will form an important and much needed addition to the Riley Hospital.

The Indiana University Nurses' Training School and the Ball Nurses' Home are parts of the medical center.

Overlooking White River from one of the most beautiful points in the City of Indianapolis, an impressive new hospital structure is looming. It is the new United States Veterans' Hospital, having a capacity of 150 beds and designed to serve men who were injured or derived illness from service in the army. Exteriorly the hospital will be nearly complete, and now presents an impressive picture.

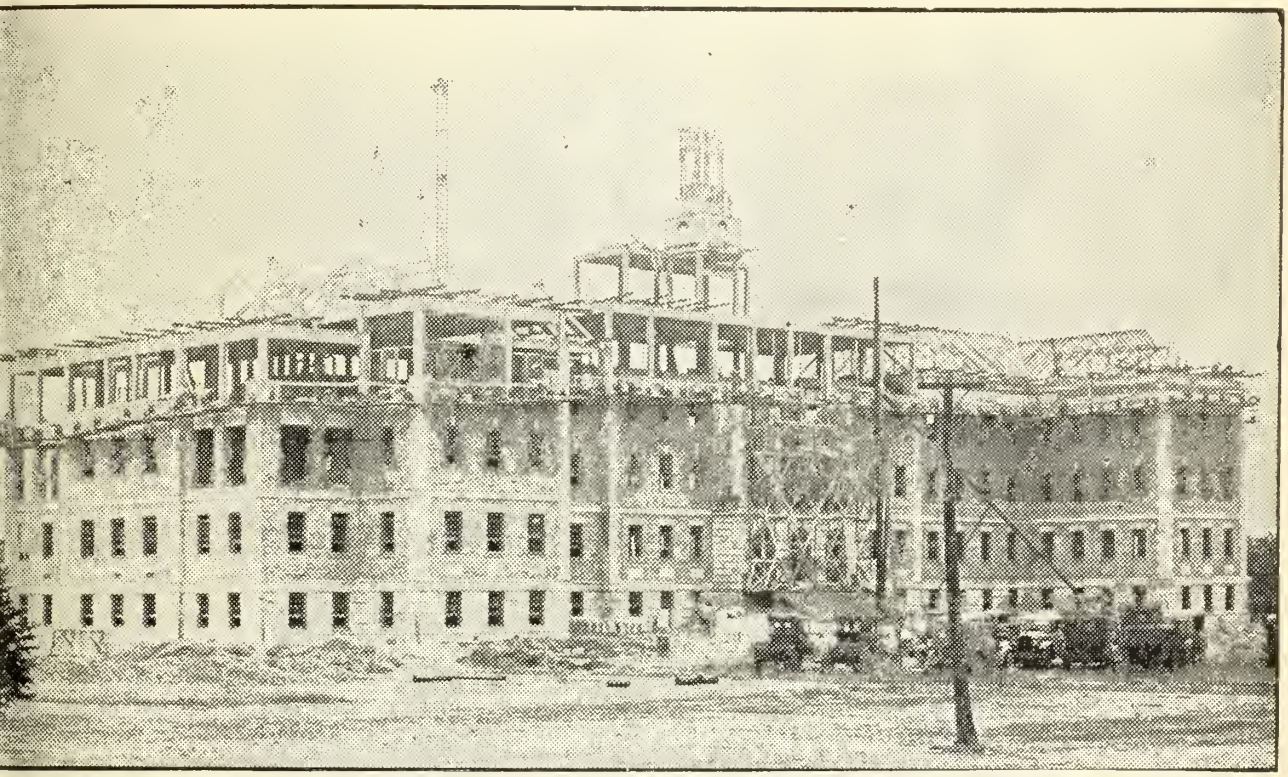
Indianapolis hospitals operated by private interests are no less distinguished in the places they hold. The Methodist Hospital, with a capacity of 250 beds, is one of the most complete of its kind. St. Vincent's Hospital is not quite so large, but its complete service and location overlooking Fall Creek at Capitol Avenue are features helping to place it in the front rank. Two smaller hospitals, the Indiana Christian and the St. Francis', hold important positions in the field of service on which smaller institutions concentrate.

Recreation

In Indianapolis recreation may be sought in a variety of ways.

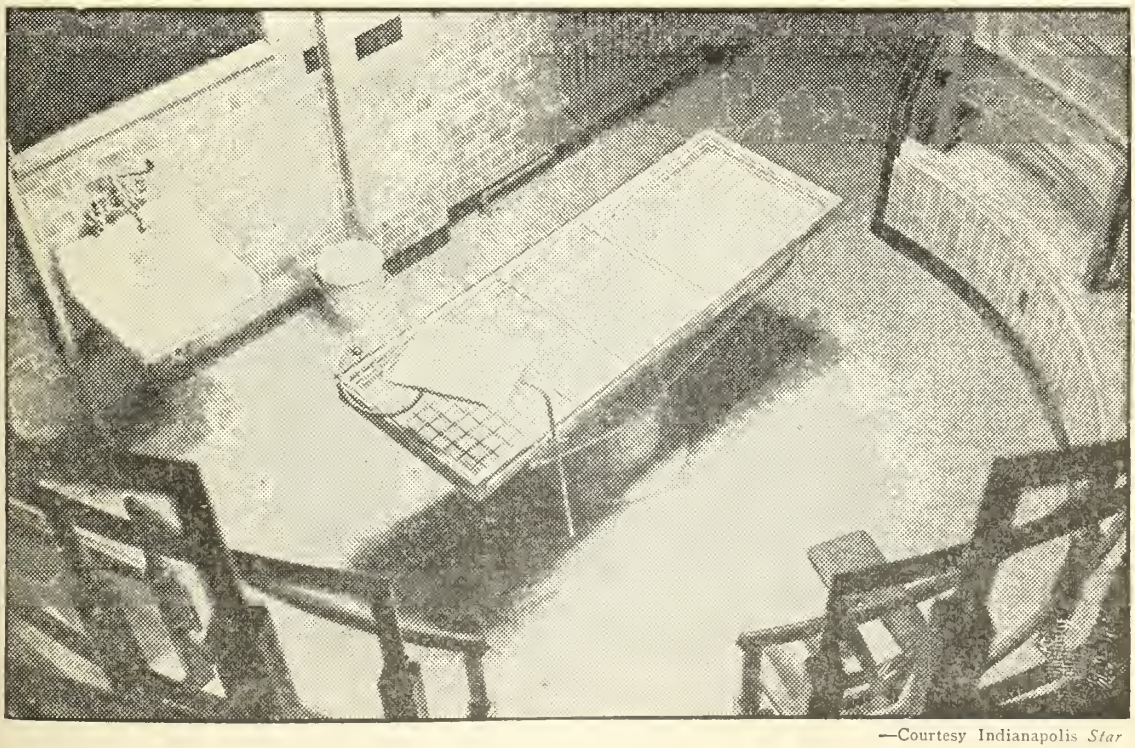
Perhaps the institution in Indianapolis known to more people than any other is the motor speedway. It may be visited at designated hours and always is interesting by reason of its being the scene of the annual 500 mile sweepstake of motordom.

The Indiana World War Memorial Plaza almost has reached the status of beauty which it



—Courtesy Indianapolis *Star*

Indiana U. S. Veterans' Hospital



—Courtesy Indianapolis *Star*

City Hospital Out-Patient Research Laboratory



—Courtesy Indianapolis *Star*

Nurses' Home—Methodist Hospital

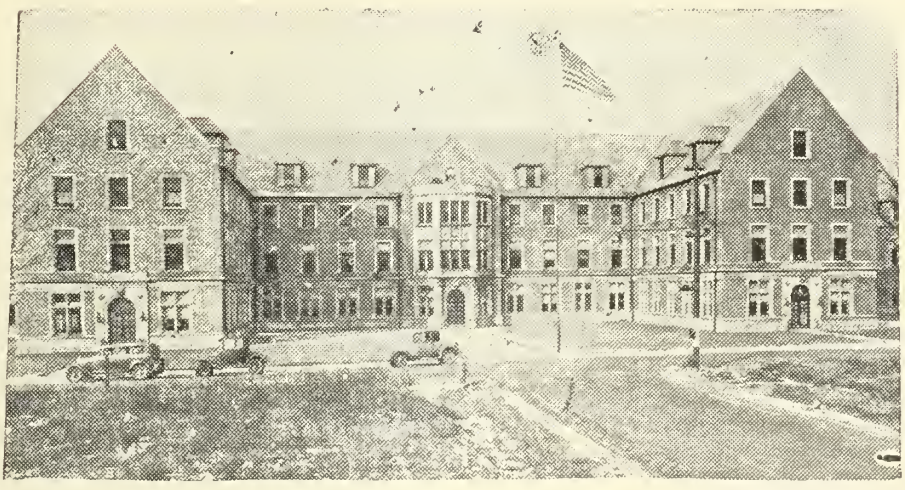


Broadmoor Country Club



—Courtesy Indianapolis *Star*

New Addition of Methodist Hospital



—Courtesy Indianapolis *Star*

James Whitcomb Riley Hospital

will possess when completed. This mammoth five-block memorial, costing $15,000,000, already is famous. It is located in the heart of the city, where the visitor cannot avoid seeing it.

Adjoining the plaza is the Scottish Rite Cathedral, and facing the plaza from the north is the Central Library.



Soldiers' and Sailors' Monument

The Soldiers and Sailors Monument is, of course, symbolic of Indianapolis. Any one who has been to Indianapolis has seen it, yet few persons have taken the trouble to inspect its statuary and to visit its museum in the basement. A trip to its balcony at the base of "Miss Indiana" gives a comprehensive view of the Capital City.

Golfers in the profession will have four municipal courses at their disposal. Two outstanding parks of a chain of several should be visited. They are Garfield on the south, and Taggart-Riverside on the north. The homes of James Whitcomb Riley, Meredith Nicholson, Booth Tarkington, Kin Hubbard, and Charles Warren Fairbanks are physical evidence of some of the famous men the state has produced in the literary field.

Indianapolis Welcomes You

A program made up of an alluring mixture of entertainment, sociability and opportunity for scientific advancement is offered. Every physician interested in keeping abreast of the leaders in his profession should attend this convention. Indianapolis as a city is proud to have the session. The members of the Association will receive a cordial welcome, and the utmost courtesy and consideration while they are guests of the city.

Places and Times of Meetings

The Claypool Hotel will be the general headquarters for the Association. Registration will be handled by the Convention Bureau on the mezzanine floor of the Claypool Hotel. Scientific exhibits and motion pictures will be presented on the mezzanine floor.

The Council will hold a luncheon meeting at the Claypool Hotel, September 23rd, and in the afternoon of the same day the House of Delegates will meet. General scientific meetings will be held in the Riley Room of the Claypool Hotel. There will be no scientific programs for the various sections.

Woman's Auxiliary

The meeting of the state executive board of the Woman's Auxiliary will be held September 23rd, at the home of Mrs. W. F. Clevenger, 3909 North Meridian Street. A breakfast-business meeting will be held Thursday, September 24th, at 8:30 a. m., at the Propylæum.

Entertainment

The golf tournament will be held at the Broadmoor Country Club, 9:00 a. m. to 5:00 p. m., with luncheon served at the Club House. All golfers will be guests of the Indianapolis Medical Society both for tournament and luncheon. For those who do not play golf, there will be a visit to the Indianapolis plant of Eli Lilly and Company in the afternoon, for which transportation will be supplied. In the evening of September 23rd, there will be a theater party for physicians, wives and guests at the Caleb Mills Hall, New Shortridge



Claypool Hotel
Headquarters for the Indianapolis Session

High School Building. Golf prizes will be distributed at this time.

There will be a luncheon for visiting women, followed by bridge, at the Indianapolis Country Club, September 24th. Hostesses will be members of the Woman's Auxiliary to the Indianapolis Medical Society. There will be fraternity and class luncheons in private dining rooms of the Claypool Hotel, and the World War Veterans' luncheon also will be served in a private dining room of the Claypool Hotel. The annual banquet for physicians, wives and guests will occur in the Riley Room, mezzanine floor, Claypool Hotel, September 24th at 7:30 p. m.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Indianapolis, September 23, 24 and 25, 1931.

The House of Delegates will be constituted as follows: Marion County, ten delegates; Lake County, four delegates; Allen County, three delegates; St. Joseph County, three delegates; Vigo County, three delegates; Elkhart County, two delegates; Tippecanoe County, two delegates; Vanderburgh County, two delegates; the other seventy-three county societies, each one delegate; thirteen councilors; the ex-presidents, namely, C. S. Bond, M. F. Porter, W. N. Wishard, J. C. Sexton, G. W. McCaskey, J. B. Berteling, Joseph R. Eastman, W. H. Stemm, C. H. McCully, W. R. Davidson, C. H. Good, E. M. Shanklin, Charles N. Combs, Frank W. Cregor, George R. Daniels, Chas. E. Gillespie, and Angus C. McDonald. In addition to these, the president, secretary and treasurer, and the editor of THE JOURNAL, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 804 Hume-Mansur Building, Indianapolis, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p. m. Wednesday, September 23, in the Riley Room, mezzanine floor, Claypool Hotel, and again at 7:00 a. m. Friday morning, September 25, in the Chateau Room, first floor, of the Claypool Hotel, (breakfast meeting).

The order of business will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meetings.
4. Appointment of reference committees.
5. Report of the executive secretary.
6. Report of the treasurer.
7. Report of the chairman of the council.
8. Report of standing committees.
   a. Credentials.
   b. Executive.
   c. Public Policy and Legislation.
   d. Bureau of Publicity.
   e. Medical Education and Hospitals.
   f. Scientific Work.
   g. Necrology.
   h. Postgraduate Study.
   i. Delegates to the A. M. A.
   j. Arrangements.
   k. Diphtheria.
9. Reading of Communications.
10. Reading of Memorials and Resolutions.
11. Unfinished Business.
12. New Business.
13. Adjournment.

The election of officers will be the first order of business at the second meeting of the House of Delegates. In addition to the regular officers, the terms of the following officers expire December 31, 1931, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Albert E. Bulson, Fort Wayne, and F. S. Crockett, Lafayette, and alternates, W. C. McFadden, Shelbyville, and G. D. Scott, Sullivan, and David Ross, Indianapolis, delegate, deceased.

Delegates from the third, sixth and ninth districts are reminded that the terms of their councilors will expire December 31, 1931, and new councilors should be elected to succeed the following:

Third District: Walter Leach, New Albany.
Sixth District: B. G. Keeney, Shelbyville.
Ninth District: F. T. Romberger, Lafayette.
Twelfth District: E. M. VanBuskirk elected to fill the unexpired term of H. O. Bruggeman.

Some of these elections may already have been held but should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,
Executive Secretary.

ANNOUNCEMENTS

All Nu Sigma Nus, active and alumni, are invited to attend the Nu Sigma Nu luncheon which will be held at 12:30 p. m. Thursday, September 24th, at the Claypool Hotel. Get your tickets at the registration desk.

All members and those accompanying them are requested to register upon their arrival. The Bureau of Information and Registration will be on the mezzanine floor, Claypool Hotel.

Members of the House of Delegates are reminded that the first meeting will be on Wednesday, September 23rd, in the Riley Room, mezzanine floor, Claypool Hotel, at 4:00 p. m.

Members of the Council will hold their first meeting in the private dining-room of the Claypool Hotel, mezza-

nine floor, on Wednesday, September 23rd, at 12:30 p. m. This will be a luncheon meeting.

Essayists will kindly remember that all papers presented before the session of the Association become the property of the Association and therefore are not to be published or submitted for publication elsewhere than in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

When you register you will be given an official badge. You are requested to wear it, and particularly so when attending or participating in meetings. Members of the House of Delegates will have designating badges. Only accredited delegates are entitled to vote at any meeting of the House of Delegates, or even to address the House of Delegates without special permission.

Register early. The booth for registration will be open throughout the session. Please have your pocket cards with you in order to avoid delay in registration. If you have paid your dues to your county secretary *only recently* and have not yet received your membership card, present a receipt from your county secretary and you will be permitted to register. *Please get your badge and wear it.*

Scientific and commercial exhibits will be open on Wednesday, Thursday and Friday mornings, on the mezzanine floor, Claypool Hotel.

Women physicians will hold a dinner meeting Wednesday, September 23rd, at 6:00 p. m., at the Propylæum.

The sections will have no sectional scientific programs this year. There will be a short business meeting and election of officers for all sections immediately after the final general scientific meeting convenes on Friday at 9:00 a. m.

Golfers will have their annual tournament at the Broadmoor Country Club at 9:00 a. m. September 23rd. All golfers will be guests of the Indianapolis Medical Society for tournament play and luncheon at the Broad moor Country Club. Transportation will be provided for those who wish it if they will report immediately upon arrival at the Claypool Hotel.

Plan to be present at the annual banquet for physicians, wives and guests in the Riley Room of the Claypool Hotel, 7:30 p. m., September 24th. Edward H. Cary, M.D., of Dallas, Texas, president-elect of the American Medical Association, will be the principal speaker.

CONDENSED PROGRAM

(Schedule is made out on Central Standard Time.)

Wednesday, September 23, 1931

Morning

9 a. m. to 6 p. m., Registration, mezzanine floor, Claypool Hotel.

9 a. m. to 6 p. m., Commercial exhibit, mezzanine floor, Claypool Hotel.

9 a. m. to 6 p. m., Scientific exhibit and moving pictures, mezzanine floor, Claypool Hotel.

9 a. m. to 6 p. m., Annual golf tournament. Eighteen holes, low gross and handicap medal play, Broadmoor Country Club.

12 m., Golf luncheon, Club House, Broadmoor Country Club. All golfers will be guests of the Indianapolis Medical Society, both for tournament play and the luncheon.

Afternoon

Throughout the afternoon all members of the Indiana State Medical Association and their guests and families are cordially invited to be the guests of Eli Lilly & Company for a trip to the Indianapolis plant. Transportation will be supplied.

12:30 p. m., Luncheon, Council, Indiana State Medical Association, private dining-room, mezzanine floor, Claypool Hotel.

1:30 to 4 p. m., Inspection of commercial and scientific exhibits, mezzanine floor, Claypool Hotel.

3:30 p. m., Meeting of Executive Board of the Woman's Auxiliary to the Indiana State Medical Association, at home of Mrs. W. F. Clevenger, 3909 North Meridian Street.

4:00 p. m., Meeting of House of Delegates, Riley Room, mezzanine floor, Claypool Hotel.

4 to 6 p. m., Garden party and reception for all visiting women in honor of the presidents of the county society auxiliaries at home of Mrs. W. F. Clevenger, president of Woman's Auxiliary to the Indianapolis Medical Society, 3909 North Meridian Street.

Evening

6:00 p. m., Dinner for women physicians at Propylæum.

8:15 p. m., Theater party, "The Second Man," by The Civic Theater of Indianapolis, Caleb Mills Hall, New Shortridge High School Building, Thirty-fourth and Meridian Streets. Award of golf prizes.

Thursday, September 24, 1931

Morning

8 a. m. to 6 p. m., Registration, mezzanine floor, Claypool Hotel.

8 a. m. to 6 p. m., Commercial exhibit, mezzanine floor, Claypool Hotel.

8 a. m. to 6 p. m., Scientific exhibit and moving pictures, mezzanine floor, Claypool Hotel.

8:30 a. m., Breakfast and business meeting, Woman's Auxiliary to the Indiana State Medical Association, Propylæum, 1410 North Delaware Street.

9 a. m. to 12 m., General scientific meeting, Riley Room, mezzanine floor, Claypool Hotel.

Noon

12 m. to 1 p. m., Visit and inspection of commercial and scientific exhibits.

Various fraternity, military and class luncheons and World War veterans' get-togethers in private dining-rooms, Claypool Hotel.

Afternoon

1:00 p. m., Luncheon for visiting women, followed by bridge, Indianapolis Country Club. Members of Woman's Auxiliary to the Indianapolis Medical Society, hostesses.

2 p. m. to 5 p. m., General scientific meeting, Riley Room, mezzanine floor, Claypool Hotel.

Evening

7:30 p. m., Annual banquet, Riley Room, mezzanine floor, Claypool Hotel. Principal speaker, Edward Henry Cary, M.D., Dallas, Texas, president-elect, American Medical Association.

Friday, September 25, 1931

Morning

7:00 a. m.,	Breakfast meeting, election of officers, etc., House of Delegates, Chateau Room, first floor, Claypool Hotel. Meeting of Council immediately following adjournment of House of Delegates, Chateau Room, first floor, Claypool Hotel.
8 a. m. to 12 m.,	Registration, mezzanine floor, Claypool Hotel.
8 a. m. to 12 m.,	Commercial and scientific exhibits and moving pictures, mezzanine floor, Claypool Hotel.
9 to 11:50 a. m.,	General scientific meeting, Riley Room, mezzanine floor, Claypool Hotel.
9:10 a. m.,	Election of section officers immediately after general meeting convenes.

PROGRAM FOR WOMEN'S ENTERTAINMENT AND WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

Wednesday, September 23, 1931

3:30 p. m.,	Meeting of State Executive Board, at home of Mrs. W. F. Clevenger, president, Woman's Auxiliary to the Indianapolis Medical Society, 3909 North Meridian Street.
4 to 6 p. m.,	Garden party and reception for all visiting women in honor of the presidents of the county society auxiliaries at home of Mrs. W. F. Clevenger, 3909 North Meridian Street.
8:15 p. m.,	Theater party, "The Second Man," by The Civic Theater of Indianapolis, Caleb Mills Hall, New Shortridge High School Building, Thirty-fourth and Meridian Streets.

Thursday, September 24, 1931

8:30 a. m.,	Breakfast, Woman's Auxiliary to the Indiana State Medical Association, Propylæum, 1410 North Delaware Street.
9:30 a. m.,	Business meeting. Election of officers of Woman's Auxiliary.
10:30 a. m.,	Address by Miles F. Porter, Sr., M.D., Fort Wayne.
1:00 p. m.,	Luncheon for visiting women followed by bridge, Indianapolis Country Club. Members of Woman's Auxiliary to the Indianapolis Medical Society, hostesses.
7:30 p. m.,	Annual banquet. Principal speaker, Edward Henry Cary, M.D., Dallas, Texas, president-elect, American Medical Association.

Friday, September 25, 1931

Shopping trip.

Both Wednesday and Thursday evenings the women are invited to join the physicians in the regular program, Wednesday evening at the theater party and Thursday evening at the banquet. Hospitality Committee will be at headquarters at all times to care for the visiting women.

ANNUAL BANQUET

Riley Room, Claypool Hotel

7:30 P. M., Thursday, September 24, 1931

Presiding Officer, A. B. Graham, M.D., President, Indiana State Medical Association.

Presentation of certificate of merit to Angus C. McDonald, president of Indiana State Medical Association, 1930, by E. M. Shanklin, M.D., ex-president of Indiana State Medical Association and ex-chairman of the Council.

Presentation of certificate of merit to William A. Doeppers, M.D., who has served as treasurer of the Indiana State Medical Association since January 1, 1926, by A. B. Graham, M.D., president, Indiana State Medical Association.

Principal address: "What the American Medical Association Means to You," by Edward Henry Cary, M.D., Dallas, Texas, president-elect, American Medical Association.

Music.

OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

To Be Held at the Claypool Hotel, Indianapolis, Indiana September 23, 24, 25, 1931

(Schedule is made out on Central Standard Time)

House of Delegates

First meeting in Riley Room, mezzanine floor, Claypool Hotel, Wednesday, September 23rd, at 4:00 p. m.

Second meeting in Chateau Room, first floor, Claypool Hotel, Friday, September 25th, at 7:00 a. m. (Breakfast meeting.)

Council

First meeting, private dining-room, mezzanine floor, Claypool Hotel, Wednesday, September 23rd, at 12:30 p. m. (Luncheon meeting.)

Second meeting, Friday, September 25th, immediately upon adjournment of House of Delegates, Chateau Room, first floor, Claypool Hotel.

Additional meetings at the call of the Chairman of the Council.

General Scientific Meetings

First meeting, Thursday, September 24th, Riley Room, mezzanine floor, Claypool Hotel, from 9:00 a. m. to 12 noon.

Second meeting, Thursday, September 24th, Riley Room, mezzanine floor, Claypool Hotel, from 2:00 p. m. to 5:00 p. m.

Third meeting, Friday, September 25th, Riley Room, Claypool Hotel, 9:00 a. m. to 11:50 a. m.

Section Meetings

There will be no scientific program for the various sections this year. A short business meeting and election of officers for all sections will be held immediately after the final general scientific meeting convenes Friday at 9:00 a. m.

Meeting of Women Physicians

Dinner meeting, Wednesday, September 23rd, at 6:00 p. m., Propylæum, 1410 North Delaware Street.

Meeting of Woman's Auxiliary

Meeting of State Executive Board, Wednesday, September 23rd, 3:30 p. m., at home of Mrs. W. F. Clevenger, 3909 North Meridian Street.

Breakfast and business meeting, Thursday, September

24th, 8:30 a. m., and address by Dr. Miles F. Porter, Sr., Fort Wayne, Propylæum, 1410 North Delaware Street. Subject: "What Can We Do and How Shall We Do It?"

Scientific Exhibits

All day Wednesday and Thursday, and Friday morning, mezzanine floor, Claypool Hotel.

Commercial Exhibits

All day Wednesday and Thursday, and Friday morning, mezzanine floor, Claypool Hotel. (For special hours of inspection, see condensed program.)

Registration

All day Wednesday and Thursday, and Friday morning, mezzanine floor, Claypool Hotel.

Entertainment

Wednesday, September 23rd:

Golf tournament, Broadmoor Country Club, 9:00 a. m. to 5:00 p. m., with luncheon served at the Club House. All golfers will be guests of the Indianapolis Medical Society both for tournament and luncheon. Automobiles leave Claypool Hotel at 8:15 a. m. for Broadmoor Country Club. Transportation will be available for all golfers not having cars if they report immediately upon arrival in city to golf division at registration desk on mezzanine floor, Claypool Hotel.

Garden party and reception for all visiting women in honor of the presidents of the county society auxiliaries, at home of Mrs. W. F. Clevenger, president, Woman's Auxiliary to the Indianapolis Medical Society, 3909 North Meridian Street, from 4:00 to 6:00 p. m.

Visit to Indianapolis plant of Eli Lilly & Company throughout afternoon for all members of the Indiana State Medical Association and their guests and families. Transportation will be supplied.

Theater party for physicians, wives and guests, 8:15 p. m.: "The Second Man," by The Civic Theater of Indianapolis, Caleb Mills Hall, New Shortridge High School Building, Thirty-fourth and Meridian Streets. Distribution of golf prizes.

Thursday, September 24th:

Breakfast meeting, Woman's Auxiliary to the Indiana State Medical Association, Propylæum, 1410 North Delaware Street, 8:30 a. m.

Luncheon for visiting women followed by bridge, Indianapolis Country Club, 1:00 p. m. Members of Woman's Auxiliary to the Indianapolis Medical Society, hostesses.

Fraternity and class luncheons, private dining-rooms, Claypool Hotel, noon.

World War veterans' luncheon, private dining-room, Claypool Hotel, noon.

Annual banquet for physicians, wives, and guests, Riley Room, mezzanine floor, Claypool Hotel, 7:30 p. m. Edward Henry Cary, M.D., Dallas, Texas, president-elect, American Medical Association, principal speaker.

SCIENTIFIC PROGRAM

(Schedule is made out on Central Standard Time.)

Every paper will be open for five minutes of general discussion.

Morning
Thursday, September 24, 1931

9:00 a. m., General scientific meeting, Riley Room, mezzanine floor, Claypool Hotel. Meeting called to order by A. B. GRAHAM, M.D., Indianapolis, president, Indiana State Medical Association.

9:05 a. m., Greetings from Indianapolis Medical Society by EDMUND D. CLARK, M.D., president, Indianapolis Medical Society.

9:10 a. m., Welcome from Indiana University School of Medicine and Hospitals by C. P. EMERSON, M.D., Dean at Indianapolis.

9:25 a. m., President's address—A. B. GRAHAM, M.D., Indianapolis.

Scientific Program

F. V. OVERMAN, M.D., Indianapolis, Chairman, Section on Ophthalmology and Otolaryngology, Presiding.

10:00 a. m., D. O. KEARBY, M.D., Indianapolis.
Subject: "Per Oral Endoscopy as an Aid in Diagnosis."

Abstract:—Per oral endoscopy is the science which provides a means of examination by direct inspection. This is one of the most important methods of clinical study. In the bronchoscopic clinics of the country, ninety-eight percent of endoscopy is for aid in diagnosis and aid in treatment. Foreign bodies make up about two percent of the work. Illustrative case reports in which we have used the method for study include foreign bodies, neoplasms, tuberculosis of the lung, lung abscess, lung suppuration, mediastinal abscess, bronchial fistula, Vincent's of the lung, emphysema, lung collapse, unexplained dyspnœa, atalectasis in the new-born, paralysis of the esophagus, lesions of the pharynx and larynx, instillation of lipiodol for pneumonography.

10:20 a. m., PAUL D. CRIMM, M.D., Evansville.
Subject: "Non-tuberculous Infections of the Lungs."

Abstract:—The incidence of a few non-tuberculous infections of the lung frequently vary with occupational and environmental influences. Pneumoconiosis illustrates this statement, since a great many people work and live in a more or less quantity of organic or inorganic dust. Bronchiectasis is a much more common respiratory condition than is generally believed to exist. All chronic bronchitis may be potential cases of bronchiectasis. To my mind varying degrees of bronchiectasis are more often called tuberculosis than any other non-tuberculous infection. Approximately one-half of the non-tuberculous lung abscesses follow some operative procedure, tonsillectomy receiving the greatest burden of responsibility. Aspiration of foreign material and pneumonia predominates over other similar causes. Mycotic infections should also be considered in differential diagnoses of lung pathology. These invaders may live as saprophytes in the mouth, so their presence must be duly investigated. Frequently a mould and tuberculous infection may exist simultaneously. A definite diagnosis of syphilis of the lung is rare, because we are never too sure of its presence. It may coexist with pulmonary tuberculosis oftener than we think. Cancer of the lung does not complicate a diagnosis of tuberculosis very frequently. The few cases that are seen are usually the result of metastases from the breast, uterus, bone, stomach and liver.

It might be advantageous to the patient for the physician dealing with lung tissue pathology to have a non-tuberculous complex, and for other groups of specialists and the general practitioner to possess a tuberculous complex when dealing with any lung infection. Patients would benefit from the resultant entanglement of the two complexes. In either case his health interests demand a true, not too prolonged diagnosis, either at the expense of a physician with a tuberculous complex or the physician with a non-tuberculous perplex.

10:40 a. m., Discussion opened by B. M. Edlavitch, M.D., Fort Wayne.

11:00 a. m., B. M. TAYLOR, M.D., Portland.
Subject: "Prenatal Care from an Endocrine Standpoint and Its Effects on the Growth and Final Development of the Baby."

Abstract:—Prenatal care as taught is nothing more than personal hygiene. Women for ages have had no care except diet, exercise and urinalysis. This has no real effects upon the baby. The mother's hormones in her blood are the stimuli to the fetal development and if

these are deficient, the baby is correspondingly deficient. This gives rise to the deficiencies in babies. Rickets, eczema, delayed dentition, soft, spongy tooth enamel, flat feet, etc., are due to improper prenatal care. Basal metabolism should be taken as a guide to thyroid deficiencies or excesses. Complete physical examination should be made in all cases. Focal infections in mother cause pyelitis in baby.

11:20 a. m., Discussion opened by J. F. Clancy, M.D., Hammond.

11:30 a. m., G. B. UNDERWOOD, M.D., Evansville.
Subject: "Treatment of Common Skin Diseases."

Abstract:—The practical treatment of a number of common skin diseases is discussed in the order of frequency seen in clinical practice. Stress is laid on the simpler remedies and their indications and method of application. Attention drawn to the necessity of careful compounding of prescriptions.

11:50 a. m., Discussion opened by D. C. McClelland, M.D., Lafayette.

12:00 m. to 2:00 p. m., Recess to visit and inspect scientific and commercial exhibits.

Afternoon
Thursday, September 24, 1931

Harvey L. Murdock, M.D., Fort Wayne, Chairman, Medical Section, Presiding.

2:00 p. m., O. R. SPIGLER, M.D., Terre Haute.
Subject: "Uterine Bleeding, the Cause, with Special Reference to Malignancies and Their Treatment."

Abstract:—Discussion of tumors, differential diagnosis of tumors and malignancies, adolescent bleeding, menopause, and stressing diagnosis and treatment of malignancies of the uterus.

2:20 p. m., Discussion opened by G. G. Eckhart, M.D., Marion.

2:30 p. m., B. W. RHAMY, M.D., Fort Wayne.
Subject: "Friedman, Reinhart, Scott Hormone Test for Pregnancy." (Lantern slides.)

Abstract:—Research has established the fact that immediately on impregnation excessive amounts of the hormone of the anterior pituitary gland are secreted which is excreted in the urine. Aschheim and Zondek have utilized these established facts as the basis for a practical laboratory test by injecting this urine into virgin female mice and observing the effects of the hormone on the sexual organs of the mice. This method is shown to have an accuracy of ninety-nine percent. Friedman, Reinhart and Scott have improved and modified this test by using female rabbits instead of mice; with this modification the one percent error may be eliminated. Case reports and lantern slides show the importance of the test.

2:50 p. m., Discussion opened by A. S. Giordano, M.D., South Bend.

3:00 p. m., W. L. PORTTEUS, M.D., Franklin.
Subject: "Delivery Technique in the Home."

Abstract:—A paper on the technique of preparation of sterile supplies, delivery bed, patient, physician and instruments. Various phases of the delivery are discussed only as they pertain to the technique. Plan of procedure is as simple as possible in keeping with safe conduct of labor and cost of materials. A list of equipment carried for the average home delivery concludes the discussion.

3:20 p. m., Discussion opened by O. D. Hutto, M.D., Kokomo.

3:30 p. m., B. S. CORNELL, M.D., Fort Wayne.
Subject: "Critical Review of Hypertension."

Abstract:—The modern conception of the mechanism of hypertension of greater importance than etiological theories. The increasing prevalence of the disease. The different types of hypertension with theoretical considerations as to the causes. Essential hypertension resulting from arteriolar spasm is the type of greatest practical importance and biological significance to the race. Hypertension almost to be regarded as an American disease. Consideration of various forms of treatment—rest, hydrotherapy, psychological treatment and the use of various drugs. Sources not indicated for brevity.

3:50 p. m., Discussion opened by Harry P. Ross, M.D., Richmond.

4:00 p. m., H. H. MARTIN, M.D., LaPorte.
Subject: "Surgery of the Future."

Abstract:—The evolutionary development of surgery during the past forty years has been so rapid and so dramatic that it has failed to find a stabilizing plane. Personal enthusiasm has led to many needless operations. The profession of the future must labor as conscientiously in the prevention of the development of pathological conditions demanding surgical interference as it has labored in the past for the prevention of diseases, contagious and infectious. From statistical evidence available it appears that far too many tonsils are now being sacrificed. The high cost of medical service is very largely due to the very rapid development of surgery. The family doctor by knowing his patient is best qualified to direct his physical and mental welfare. The specialist, as the result of insufficient training along general lines, not infrequently fails to comprehend the patient as a living entity, and disaster results. A fuller comprehension of their responsibility by those responsible for the training and developing of the medical doctor of the future will in no small way eliminate many of the medical ills of today. Surgery of the future, outside of the larger medical centers, will be very largely in the hands of the general practitioner.

4:20 p. m., Discussion opened by F. H. Jett, M.D., Terre Haute.

4:30 p. m., H. L. STANTON, M.D., Evansville.
Subject: "Etiology and Operative Treatment of Squint."

Abstract:—Misunderstanding as to cause of deviation of the eyes both in childhood and adult life. Alternating squint. Absence of fusion power. Large error of refraction in one eye and smaller error in other. Congenital background. Correction by proper fitting of lenses. Correction by operation. Action of muscles. Illustrations.

4:50 p. m., Discussion opened by H. C. Knapp, M.D., Huntingburg.

7:30 p. m., Annual banquet.

Friday Morning, September 25, 1931

W. E. Tinney, M.D., Indianapolis, Chairman, Surgical Section, Presiding.

9:00 to 9:10, Election of Section officers for 1932.

SYMPOSIUM—GASTROINTESTINAL DISEASES

9:10 to 9:30, "Medical Phase—Duodenitis and Motor Disorders of the Duodenum," R. L. SENSENICH, M.D., South Bend. (Lantern demonstration.)

Abstract:—Duodenitis associated with duodenal ulcer or diseases of the stomach or gallbladder, as well as independent of any of these conditions, has been repeatedly reported by pathologists. In many cases there are characteristic clinical findings. Clinical phenomena of similar kind varying in intensity and duration have also been described, due to motor disorders of the duodenum. The possibility of duodenal pathology other than ulcer as a cause of symptoms should be seriously considered in the differential diagnosis of digestive disorders if proper treatment, medical or surgical, is to be given. Outline of treatment suggested.

9:30 to 9:50, "Surgical Phase—Intussusception," HAROLD D. CAYLOR, M.D., and TRUMAN E. CAYLOR, M.D., Bluffton.

Abstract:—This study includes a consideration of the anatomical and physiological elements involved in intus-

susception together with other etiological factors and the diagnosis and treatment. Two cases with recovery are reported.

9:50 to 10:10, "General Phase—Abdominal Surgery in Infancy and Early Childhood," H. O. BRUGGEMAN, M.D., Fort Wayne.

Abstract:—General considerations of abdominal manifestations of infancy and childhood.

10:10 to 10:20, Discussion opened by Roscoe Beeson, M.D., Muncie.

10:20 to 10:30, General discussion.

10:30 a. m., C. C. ROBINSON, M.D., Chief Surgeon of Inland Steel Company, Indiana Harbor.

Subject: "Present Status of Burn Therapy."

Abstract:—Classes and degrees of burns. Review of literature. Metabolic disturbances following burns. Interference with normal function of skin. The toxemia theory. Treatment of burns.

10:50 a. m., Discussion opened by A. G. Schlieker, M.D., East Chicago.

11:00 a. m., ERNEST O. NAY, M.D., Terre Haute.
Subject: "Early Prostatectomy."

Abstract:—A plea for prostatectomy before the kidneys and cardiovascular system have been impaired. Prostatectomy should no longer be an emergency operation but an operation of choice. The reasons patients do not come in earlier after the onset of symptoms are outlined. Early diagnostic points are enumerated. The results of early prostatectomy in regard to mortality and functional results are discussed.

11:20 a. m., Discussion opened by J. E. Hiatt, M.D., Richmond.

11:30 a. m., P. D. MOORE, M.D., Muncie.
Subject: "Traumatic Spine."

Abstract:—Review of literature reveals high rate of late diagnosis; also high ercentage of poor results in treatment of commonest spinal lesions, sometimes due to late diagnosis; also high percentage of poor results in Attention to details is important in diagnosis; must have adequate x-ray evidence. Treatment.

11:50 a. m., Discussion opened by H. P. Graessle, M.D., Seymour.

12 m., Adjournment.

SCIENTIFIC EXHIBIT AND MOVING PICTURES

Ernest Rupel, M.D., Indianapolis,
Director of Scientific Exhibits.
Mezzanine Floor, Claypool Hotel.

I FLOYD T. ROMBERGER, M.D.
Spinal Anesthesia. Exhibit of papier mache models of the human spinal cord together with an exhibit of 80 lantern slides demonstrating various phases of spinal anesthesia.

II C. B. JORDAN, DEAN, Purdue University School of Pharmacy. Exhibit of United States Pharmacopœias and National Formularies and old medical and pharmaceutical books. In addition, considerable interesting pharmaceutical and medical apparatus.

III ALBERT E. STERNE, Indiana University School of Medicine, Indianapolis. Constructive neurodiagnosis and visual graphic teaching. Exhibit of several hundred hand-colored slides of neural mechanisms, systemic tracts, serial sections (normal and pathologic), gross and fine neuropathologic changes; the autonomic system with new work on the extrinsic and intrinsic innervation of the heart, etc.; charts, brain and spinal cord sections.

Dr. Larue Carter, who was Dr. Sterne's associate, will show Dr. Sterne's exhibit.

IV THE METHODIST HOSPITAL, of Indianapolis. Departmental exhibits. Unusual photography.

V LESTER A. SMITH, M.D., President, Indiana Radiological Association. A display of films accurately representing x-ray studies of the conditions concerned in the discussions read on the floor of the scientific sessions. These films have been selected as a complement to the scientific session.

VI WM. F. KING, M.D., Secretary, Indiana State Board of Health. A display of the State Board of Health.

VII R. N. HARGER, PH.D.
Department of Biochemistry, Indiana University.

VIII THURMAN B. RICE, M.D., Chairman, Diphtheria Prevention Committee, Indiana State Medical Association.
Diphtheria in Indiana.

IX DEPARTMENT OF SURGERY, Surgical Pathology and Orthopedic Surgery, University Hospitals.

X W. DODDS, M.D.
Department of Pathology, University Hospitals.

XI EDGAR F. KISER, M.D., AND C. B. BOHNER, M.D.
Flarimeter Tests in Clinical Medicine.

XII INDIANA STATE MEDICAL ASSOCIATION.
The exhibit of pathology tissue showing diseases, in animal tissue, which are also incidental to man.

XIII DEPARTMENT OF UROLOGY, Indianapolis City Hospital.
Educational studies of the urinary tract.

XIV B. W. RHAMY, M.D., Fort Wayne.
Mounted gross specimens illustrating the hormone test for pregnancy.

XV INDIANA STATE DENTAL ASSOCIATION.
Dental health.

XVI INDIANA PHARMACEUTICAL ASSOCIATION.
An exhibit of materials interesting to physicians.

XVII ADA SCHWEITZER, M.D., Director, Division of Infant and Child Hygiene, Indiana State Board of Health.

MOVING PICTURES

I MAX A. BAHR, M.D.
Moving picture presentation with pathological demonstration.
Fig. 1. Case of Hemiatrophy of the Brain.
Fig. 2. Case of Subdural Hemorrhage.

II DRS. H. B. KELLOGG AND W. F. WINDLE of the Department of Anatomy, Northwestern University, Chicago, Illinois.
Anatomy of the Female Pelvis and Perineum.
(Property of Petrolagar Laboratories.)

III DRS. L. H. GILMAN AND HERBERT CALL, Riley Hospital.
Neurologic studies.

IV INDIANA STATE BOARD OF HEALTH, Mr. Raymond Bright, exhibitor.
Educational health studies.

Mr. Raymond Bright will have charge of the mechanical part of the motion picture displays of the Scientific Exhibit. The Association is indebted to him.

Wednesday, September 23, 1931

2:00 p. m., Anatomy of the Female Pelvis and Perineum. Drs. H. B. Kellogg and W. F. Windle, Department of Anatomy, Northwestern University, Chicago, Illinois. (Property of Petrolagar Laboratories.)

2:45 p. m., Moving Picture Presentation with Pathological Demonstration, Max A. Bahr, M.D. Fig. 1. Case of Hemiatrophy of the Brain. Fig. 2. Case of Subdural Hemorrhage.

3:10 p. m., Neurologic Studies, Drs. L. H. Gilman and Herbert Call, Riley Hospital.

3:45 p. m., Educational Health Studies, Indiana State Board of Health, Mr. Raymond Bright, exhibitor.

Thursday, September 24, 1931

9:30 a. m., Neurologic Studies, Drs. L. H. Gilman and Herbert Call, Riley Hospital.

10:00 a. m., Educational Health Studies, Indiana State Board of Health, Mr. Raymond Bright, exhibitor.

10:45 a. m., Moving Picture Presentation with Pathological Demonstration, Max A. Bahr, M.D. Fig. 1. Case of Hemiatrophy of the Brain. Fig. 2. Case of Subdural Hemorrhage.

11:15 a. m., Anatomy of the Female Pelvis and Perineum. Drs. H. B. Kellogg and W. F. Windle, Department of Anatomy, Northwestern University, Chicago, Illinois. (Property of Petrolagar Laboratories.)

2:00 p. m., Moving Picture Presentation with Pathological Demonstration, Max A. Bahr, M.D. Fig. 1. Case of Hemiatrophy of the Brain. Fig. 2. Case of Subdural Hemorrhage.

2:30 p. m., Neurological Studies, Drs. L. H. Gilman Herbert Call, Riley Hospital.

3:10 p. m., Educational Health Studies, Indiana State Board of Health, Mr. Raymond Bright, exhibitor.

3:45 p. m., Anatomy of the Female Pelvis and Perineum. Drs. H. B. Kellogg and W. F. Windle, Department of Anatomy, Northwestern University, Chicago, Illinois. (Property of Petrolagar Laboratories.)

Friday, September 25, 1931

9:30 a. m., Educational Health Studies, Indiana State Board of Health, Mr. Raymond Bright, exhibitor.

10:00 a. m., Neurologic Studies, Drs. L. H. Gilman and Herbert Call, Riley Hospital.

10:45 a. m., Moving Picture Presentation with Pathological Demonstration, Max A. Bahr, M.D. Fig. 1. Case of Hemiatrophy of the Brain. Fig. 2. Case of Subdural Hemorrhage.

11:15 a. m., Anatomy of the Female Pelvis and Perineum. Drs. H. B. Kellogg and W. F. Windle, Department of Anatomy, Northwestern University, Chicago, Illinois. (Property of Petrolagar Laboratories.)

COMMITTEE CHAIRMEN FOR 1931 INDIANAPOLIS SESSION

General Arrangements: R. Wynn S. Owen, M.D. (chairman), A. F. Weyerbacher, M.D., Carl Habich, M.D., Herman G. Morgan, M.D.

Finance: Wm. N. Wishard, Jr., M.D.
Entertainment: C. J. Clark, M.D.
Hotel: J. J. Littell, M.D.
Fraternity and Class Luncheons: Bert E. Ellis, M.D.
Golf: Paul T. Hurt, M.D.
Military Service: LaRue Carter, M.D.
Lanterns: J. N. Collins, M.D.
Meeting of Women Physicians: Jane Ketcham, M.D.
Banquet: John Warvel, M.D.
Reception: Edgar F. Kiser, M.D.
Automobile: J. Kent Leasure, M.D.

Woman's Auxiliary: Mrs. William S. Tomlin, President, Woman's Auxiliary to the Indiana State Medical Association; Mrs. W. F. Clevenger, President, Woman's Auxiliary to the Indianapolis Medical Society; Mrs. Lyman Pearson, Chairman, General Entertainment and Social Committee for Women.

Registration: Henry Davis, Manager, Conventions Bureau, Indianapolis Chamber of Commerce.

COMMITTEE REPORTS

REPORT OF COMMITTEE ON CREDENTIALS

House of Delegates, Indiana State Medical Association:

Gentlemen:—Your Committee on Credentials begs to make the following report:

It is necessary for every delegate who comes to the State Meeting to come with credentials signed by the president and secretary of his local county society.

We recommend that every member come with his proper credentials, as the House of Delegates is a very busy body and requires all its time in the transaction of business that it is called upon to do.

GEO. D. MILLER, M.D.,
I. E. PERRY, M.D.,
J. A. WORK, M.D.

REPORT OF EXECUTIVE SECRETARY

House of Delegates, Indiana State Medical Association:

Gentlemen:

I INTRODUCTION.

Economic improvement of the individual physician has concerned the officers and members of the Indiana State Medical Association more this past year than ever before. With the stress of conditions the individual physician and the medical profession have been faced with new problems. Many questions have arisen as a result of these problems and the profession has put a great many of these before the officers and members of the various committees of the Association, and we believe in most of the cases satisfactory answers have been received. Problems are going to continue to arise and we at headquarters office make the plea that the individual physician and the medical groups refer these matters to us. Your officers, your standing committees, your State Association attorney, all are at your service.

A Bureau of Medical Economics has been created recently by the American Medical Association and now is undertaking to survey and outline various policies which cannot help but be of greatest benefit to the members of the profession, individually and collectively. Thus the Indiana State Medical Association in its interest in economic matters is only following the lead taken by the American Medical Association in devoting its energies toward the consideration of the financial and economic welfare of its individual members. Your headquarters office is most interested in seeing that the care of the indigent sick is put on a sound basis in each township, that insurance companies no longer impose on the medical profession for free information in regard to patients, that physicians make sure that insurance and collection companies with whom they draw up contracts are reputable concerns, and that the physicians use modern and up-to-date business methods and budgets in their individual practices.

II AN ACTIVE HEADQUARTERS.

"What do they do at the headquarters office?" is the question often asked by members of the profession not directly in touch with Association activities. The best way to get an idea of the workings and accomplishments of the State Association is through reading the annual reports of the officers and committees that follow. This will give you some idea of the scope of work carried on by the State Association and will give you a conception of some of the questions that will come up for consideration before the House of Delegates and the Council at the coming session.

A short outline of some of the duties of the headquarters office follows:

First, we have an active, full-time staff of three persons on the job every working day at headquarters, and through this office the various activities of the county societies, the legislative committees and the American Medical Association program as it affects Indiana are correlated and executed. The work of this office is growing tremendously. In fact, so increased has the routine work alone become that we are faced with the necessity of employing a part-time girl to help out when the dues start to come in the first of the year. By routine work we mean the filing of letters, the constant correcting of membership records of some 4,000 physicians, the making of monthly reports to the American Medical Association, the collection of membership dues, the maintenance of medical defense records, the keeping of the treasurer's books, and the sorting and tabulation of the ever-increasing volume of work done by the Publicity Bureau. So small has the office become that this extra girl probably will have to work on Saturday afternoons when the office ordinarily is closed, at night, etc.

The amount of mail alone sent from this office may be an indication of its activity and it must be remembered that every bit of this work is in the direct interest of the medical profession and often has a positive, economic value to the individual physician. We estimate an average of 222 letters a week have been sent from headquarters office during the past year. This makes a total of 11,544 pieces of mail for the year. In addition, 330 releases are mailed each week by the Bureau of Publicity. Of course not all of these 222 letters are individually written. Many of them are form letters to committeemen, secretaries, councilors, etc., but many of them are individually written and require individual attention and action on the part of the executive secretary and the various committees.

III HISTORICAL DEVELOPMENT OF HEADQUARTERS OFFICE.

The office of the full-time lay executive secretary has been established now almost six years. It is the outgrowth of the combination of a medical publicity bureau and a regular state secretary's office. The executive secretary acts as business manager of the Association. The council and regular committees of the State Association surrender none of their powers and duties to the executive secretary, but are really more powerful due to the fact that they are more active since the establishment of a headquarters office and the employment of an executive secretary. The executive secretary fills the place occupied by the liaison officer back in the old war days, coordinating the work of the county medical societies in the front-line trenches with that of the American Medical Association back at headquarters.

IV WHAT A HEADQUARTERS OFFICE DOES.

1. At the headquarters office all of the administrative details of the Association, working through the state Executive Committee and under the control of the Council, are handled. Visits are made to the weak societies, they are bolstered up and all societies are helped to maintain a high standard of activity—

(a) By talks of the society officers before county and district societies.

(b) By monthly bulletins to secretaries of county societies.

(c) By keeping a complete Kardex record of every physician, not only of the physicians who are members of the State Association but every physician in the state. These records are up to date. Reports of these records are sent monthly to the American Medical Association. A complete tabulation is kept as to physicians in good standing, physicians who are blacklisted for ethical reasons and a brief history concerning each individual member of the Association, the time he was licensed to practice medicine in the state, the school he attended, his date of graduation and his present location.

2. Answering of many ethical questions through the Bureau of Publicity and Executive Committee.

3. Maintaining an up-to-date file of possible locations that are available for physicians. This is done in cooperation with the salesmen of the various large pharmaceutical houses of Indiana. Splendid results have been obtained from this service.

4. Supplying of material for medical and lay talks. Many requests are received for such material.

5. Making out special membership lists for secretaries of district societies.

6. The headquarters office keeps all records of medical defense cases. The Indiana State Medical Association has an unusually successful medical defense program for its members. Seventy-five cents of each member's dues go to medical defense. This entails a great deal of clerical and stenographic work.

7. All detailed work of the treasurer's office has been done from this office since the first of December, 1925. This concentrates all administration duties of the state society in one office, the collection and recording of dues, issuing of membership cards, etc. The STATE MEDICAL JOURNAL, one of the best in the country, is edited and published by Dr. A. E. Bulson, at Fort Wayne.

8. A report upon every legislator who comes to Indianapolis is on file at this office. Records of every vote of every legislator on medical questions for the past six years are maintained. Through the state legislative committee, which meets in the headquarters office daily, if necessary, during the legislative session, the profession is kept in constant touch with the doings of the Legislature. This touch is maintained through the various county legislative committees. (Each county society has its own legislative committee which cooperates with the state committee.)

9. The headquarters office is also the headquarters of the Bureau of Publicity of the Indiana State Medical Association. This Bureau meets once a week and does an infinite amount of work. It sends out weekly an article on scientific medicine to 250 papers and 800 members of parent-teacher associations throughout the state. It maintains a speaking bureau and provides medical speakers for lay meetings. It supplies also essayists for county medical society meetings. If a county society wants a speaker on any subject, the county secretary writes to the headquarters office and the matter is presented to the Publicity Bureau. The Bureau is a real bureau of information and answers all questions that arise. The various newspapers of the state and the various press associations have become accustomed to calling the headquarters office in regard to questions of medical news. Thus, authentic information upon medical occurrences comes from the headquarters office. The headquarters office cooperates with the Better Business Bureau in making reports and gaining information upon quacks.

10. The headquarters office makes all arrangements for the convention, meeting with local committees to insure proper accommodations, proper meeting places, proper entertainment, etc. (This work starts for each year right after annual meeting of year before.)

11. One of the big duties of the headquarters office is the handling of the commercial exhibits at the annual meeting. This alone takes an enormous amount of time and correspondence, but it is well worth while as it gives the State Association a good income. The headquarters office is responsible for laying out the floor plan, sending out the announcements, getting in the contracts, and collecting the money for the commercial exhibit at each convention.

12. General Duties. Besides this, the headquarters office acts, as nearly as possible, as representative for each individual physician in Indiana who is a member of the state society. Special effort is made to give complete information and wholehearted help to individual physicians who write in on any matter. We look up and check up on cases that individual physicians have before the Industrial Board, physicians throughout the state can call upon us for information they may desire in getting material

for essays, or obtaining information on anything that has to do with the medical profession. This work is growing each month. The headquarters office acts as representative for the medical profession cooperating with the Indiana University School of Medicine,. with the Indiana Council of Social Agencies, and maintains close touch and cooperation with the State Board of Medical Registration and Examination.

In short, the headquarters office will attempt to handle any professional or personal problem of a medical nature of any of its members when these questions are submitted to it. Questions will be answered relating to the practice of medicine and the interpretation of any state or federal law, state compensation law, state license law, narcotic laws, health laws. It will see that questions are answered relative to licensure and reciprocity. It will give advice upon any collection matter. The headquarters office desires to be of the greatest benefit possible.

V COMPARATIVE DUES AND SERVICE WITH OTHER STATE ASSOCIATIONS.

In looking over figures recently published by the American Medical Association it is shown that out of twenty-five states listed, fourteen have dues larger than Indiana, some ranging as high as $20.00 a year, and ten have dues lower than Indiana, but with the possible exception of two states every one of those states whose dues are lower than Indiana's has made either no provision for the same broad medical defense such as protects every member in good standing of the Indiana State Medical Association, or the cost of medical defense is additional to state dues. In some states where dues are lower than in Indiana there is a registration charge at state conventions. There is no registration charge in Indiana. In some states every physician must pay an entertainment charge for state conventions. This is not so in Indiana.

Dues for state associations surrounding Indiana follow:

Illinois	$ 8.00
Iowa	7.50
Michigan	10.00
Missouri	8.00
Wisconsin	15.00
West Virginia	9.00
Ohio	5.00
Kentucky (medical defense $5.00 extra)	5.00

VI CONCLUSION.

In conclusion your secretary wishes to thank the officers and members of the Association for the many very kind expressions of good will and confidence in the headquarters office during the past year. Perhaps it is not out of line to mention here the services of all those men who make the Indiana State Medical Association the efficient organization it is, that is, the officers and active members of the individual county medical societies. The strength of the State Association is founded on the efforts, labor and devoted service of these men who take the time to serve as leaders in their local organizations. The Indiana State Medical Association never has been or never will be a one-man organization and so far as my knowledge goes, no official body of the Indiana State Medical Association has ever neglected its duty or failed to serve whenever called into action. In this most earnest effort and unselfish action lies the strength of the Indiana State Medical Association.

THOMAS A. HENDRICKS,
Executive Secretary.

REPORT OF TREASURER

House of Delegates, Indiana State Medical Association:

Gentlemen:—Following is a statement from the treasurer of the Indiana State Medical Association for the fiscal year ending July 31, 1931. Your treasurer feels that with all the apparent depression in Indiana our Association is in a healthy financial condition.

The books have been audited by certified public accountants and their report is attached herewith:

Indiana State Medical Association,
804 Ilume-Mansur Building,
Indianapolis, Indiana.

Gentlemen:

According to your instructions, we have made an audit of your records for the fiscal year ending July 31, 1931, and submit herewith our report. We attach hereto and make a part of this report, the following exhibits:

Exhibit A Statement of Application of Funds.
Exhibit B Comparative Statement of Application of Funds.
Exhibit C Comparative Statement of Surplus Account.
Exhibit D Report of Petty Cash Fund.
Exhibit E Bank Reconciliation.
Exhibit F Analysis of Receipts by Counties.

No interest has been received on the One Thousand Dollar Rokeby Apartment Hotel Bond since July 1, 1930. A receipt from the Chicago Bank of Commerce Depository acknowledges receipt of this bond under date of May 1, 1931. It is planned to issue Trust Bonds at the rate of 80 percent, and under that plan the Association will suffer a loss of $200.00 plus interest from July 1, 1930, until such time as the Trust Bond interest becomes effective.

The Four Beachton Court Apartment Bonds in the amount of One Thousand Dollars ($1000.00) each have been returned to the Schloss Bros. Investment Company. The interest on these bonds to June 1, 1931, has been received. The Association will probably suffer a loss on these bonds also, but it is impossible to set up the exact amount at this time; therefore, these bonds are carried in the surplus account at their original value. The Rokeby Apartment Hotel Bond is also carried in the Surplus Account at its original value as the transfer has not been completed.

All bonds listed in the Analysis of the Surplus Account, with the exception of those mentioned in the preceding paragraphs, are in the Safety Deposit Box at the Meyer Kiser Bank, and the accounts as shown by the records have been found to be correct.

We wish to express our thanks for the courtesies extended to us during our work in connection with this audit.

We hereby certify that the information contained in this report was taken from the records of the Association, and subject to the foregoing comment, in our opinion, correctly reflects the results of operation and financial condition of the Association for the period specified.

Yours very truly,
HAYES & WHITAKER,
By T. W. Whitaker.

INDIANA STATE MEDICAL ASSOCIATION
Indianapolis, Indiana

Statement of Application of Funds
August 1, 1930, to July 31, 1931

Income

Membership Dues	$19,432.00	
Less Refunds	14.00	
		$19,418.00
Depository Interest		113.77
Liberty Bond Interest		212.50
Realty Bond Interest		270.00
School Improvement Bond Interest		112.50
City Hospital Bond Interest		214.15
State Highway Bond Interest		83.34
Certificate of Deposit Interest		180.00
Exhibit Rent		3,022.50
Indianapolis Medical Society		38.34
Fort Wayne Medical Society		100.00
T. A. Hendricks—Unused Expense Account		13.60
Total Income		$23,778.70

Expenditures	
Executive Secretary's Office	$11,802.64
Publicity Committee	595.18
Public Policy	347.17
Journal	5,548.00
Council	235.06
Treasurer's Office	159.00
Annual Session	2,342.20
Miscellaneous Committees	216.19
Attorney Fees	400.00
Medical Defense	450.00
Interest	1,027.71
Total Expenditures	23,123.15
Net Gain	$ 655.55
Plus Balance August 1, 1930	6,799.53
Balance July 31, 1931	$ 7,455.08

EXHIBIT "A"

INDIANA STATE MEDICAL ASSOCIATION
Indianapolis, Indiana
Comparative Statement of Application of Funds
August 1, 1930, to July 31, 1931

Income	*1930*	*1931*	*Increase*	*Decrease*
Membership Fees	$19,188.00	$19,418.00	$230.00	$
Liberty Bond Interest	212.50	212.50		
Real Estate Bond Interest	300.00	270.00		30.00
Certificate of Deposit Int.	889.37	180.00		709.37
Depository Interest	166.03	113.77		52.26
City Hospital Bond Interest		214.15	214.15	
School Imp. Bond Interest		112.50	112.50	
State Highway Bond Int.		83.34	83.34	
Income from Exhibits	3,427.50	3,022.50		405.00
Indianapolis Medical Soc.		38.34	38.34	
Ft. Wayne Med. Soc.		100.00	100.00	
T. A. Hendricks—Unused Expense Account	95.54	13.60		81.94
Certificate of Deposit	2,000.00			2,000.00
Total Income	$26,278.94	$23,770.70	$778.33	$3,278.57
Expenditures				
Executive Sec'y's Office	$10,749.81	$11,802.64	$1,052.83	$
Publicity Committee	423.19	595.18	171.99	
Public Policy		347.17	347.17	
Journal	5,474.00	5,548.00	74.00	
Council	149.39	235.06	85.67	
Treasurer's Office	59.00	159.00	100.00	
Annual Session	2,920.92	2,342.20		$ 578.72
Miscellaneous Committees	1,152.90	216.19		936.71
Attorney Fees	358.31	400.00	41.69	
Medical Defense	516.28	450.00		66.28
Interest on Bonds		1,027.71	1,027.71	
Total Expenditures	$21,803.80	$23,123.15	$2,901.06	$1,581.71
Net Income	$ 4,475.14	$ 655.55		

Net Income 1930	$4,475.14
Net Income 1931	655.55
Net Decrease	$3,819.59
Net Decrease Income	$2,500.24
Net Increase Expenditures	1,319 35
Total	$3,819.59

EXHIBIT "B"

INDIANA STATE MEDICAL ASSOCIATION
Indianapolis, Indiana
Comparative Statement of Surplus Account at July 31st, for the Years 1930 and 1931

	1930	*1931*
Surplus August 1, 1929 and 1930	$32,524 39	$34,999.53
Net Gain for Year	$ 4,475.14	655.55
Less Certificate of Deposit Converted to Cash	2,000.00	2,475.14
Surplus July 31, 1930 and 1931	$34,999.53	$35,655.08

Analysis of Surplus Account

	1930	*1931*
Liberty Bonds	$ 5,000.00	$ 5,000.00
Realty Bonds	5,000.00	5,000.00
State Highway Bonds		2,000.00
City Hospital Bonds		6,000.00
Flood Prevention Bonds		5,000.00
School Improvement Bonds		5,000.00
Certificates of Deposit	18,000.00	
Checking Account	6,799.53	7,445.08
Petty Cash	200.00	200.00
Totals	$34,999.53	$35,655.08

EXHIBIT "C"

INDIANA STATE MEDICAL ASSOCIATION
Indianapolis, Indiana
Report of Petty Cash Fund
July 31, 1931

Receipts		
Balance August 1, 1930	$ 200.00	
Checks Received from Treasurer	1,099.86	
Total		$1,299.86
Expenditures		
Executive Secretary's Office	$ 380.60	
Publicity Committee	292.30	
Annual Session	97.68	
Medical Defense	6.00	
Public Policy	234.20	
Miscellaneous Committees	89.08	
Total Expenditures		1,099.86
Balance July 31, 1931		$ 200.00

EXHIBIT "D"

INDIANA STATE MEDICAL ASSOCIATION
Indianapolis, Indiana
Bank Reconciliation
July 31, 1931

Balance per Bank Statement		$8,192.46
Deposits Not on Statement		104.00
Total		$8,296.46
Less Outstanding Checks		
123	$583.33	
124	33.33	
131	46.00	
132	80.00	
133	14.00	
134	84.72	
Total Outstanding Checks		841.38
Balance per Check Book		$7,455.08

EXHIBIT "E"

INDIANA STATE MEDICAL ASSOCIATION
Indianapolis, Indiana
Analysis of Dues Received by Counties
Year Ended July 31, 1931

	1930	*1931*		*1930*	*1931*
Adams		15	Lake	5	186
Allen	1	140	LaPorte	2	46
Bartholomew		23	Lawrence		22
Benton		11	Madison	1	61
Boone		11	Marion	13	481
Carroll		18	Miami		21
Cass		35	Monroe	1	28
Clark		17	Montgomery		30
Clay		19	Morgan		23
Crawford	2	4	Noble		22
Clinton	1	22	Orange		17
Daviess-Martin		23	Owen	1	7
Dearborn-Ohio		18	Parke-Vermillion		13
Decatur		15	Perry		10
DeKalb	2	22	Pike		7
Delaware-Blackford		69	Porter		20
Dubois		15	Posey		11
Elkhart		76	Pulaski		4
Fayette-Franklin		20	Putnam		17
Floyd		41	Randolph		22
Fountain-Warren		19	Ripley		16
Fulton	1	15	Rush		21
Gibson		25	Scott		4
Grant		38	Shelby		16
Greene		12	Spencer		10
Hamilton		21	Steuben		10
Hancock		18	St Joseph	2	143
Harrison		6	Sullivan		21
Hendricks		17	Switzerland		5
Henry		27	Tippecanoe	1	78
Howard		36	Tipton		10
Huntington		24	Vanderburgh	1	100
Jackson		18	Vigo	4	119
Jasper-Newton		18	Wabash		25
Jay	1	13	Warrick		5
Jefferson		16	Washington		8
Jennings		11	Wayne		49
Johnson	1	11	Wells		13
Knox		30	White		9
Kosciusko		14	Whitley		11
LaGrange		12	*Totals*	40	2,736
Less					
Ripley—Death		1			
Bank closed		1			2
Totals				40	2,734

Respectfully submitted,
WILLIAM A. DOEPPERS, M.D.,
Treasurer.

REPORT OF CHAIRMAN OF THE COUNCIL

House of Delegates, Indiana State Medical Association:

Gentlemen:—As the October, 1930, and the January, 1931, numbers of THE JOURNAL carry in detail the minutes of the Council, the chairman here gives only a brief outline of the principal acts of the Council during the past year.

First Meeting, Fort Wayne, September 24, 1930

The Council convened at the Anthony Hotel, Fort Wayne, a roll call showing eleven of the thirteen councilors present, along with the president, president-elect, editor of THE JOURNAL, treasurer, members of the Executive Committee, and executive secretary. As the report of each councilor had appeared in the September number of THE JOURNAL and in the Handbook of the House of Delegates and as there were no further comments, additions or changes, these reports stood as originally printed. Without exception they showed an active and healthy condition in each district.

Floyd T. Romberger, the councilor for the Ninth District, reported in detail the situation in a county of his district where the dues of an individual doctor to the State Association were held up without formal charges being filed against this doctor. The Council gave instructions that a letter should be written to the secretary of this local county medical society that the physician in question was rightfully a member of his local county society and the State Association until expelled in regular form and hence a check for this physician's dues should be sent to headquarters office.

Reports made upon technical and scientific exhibits, the latter being larger than in any previous year.

A. B. Graham, president-elect, outlined his plan for the type of program he desired in 1931, the high points of this plan being—

(1) A full three-day session.
(2) The abolition of section programs.
(3) An all-Indiana program, speakers to be chosen from names selected by the councilor of each district.

Dr. Graham's suggestions accepted by the Council and the Program Committee was instructed to follow this plan.

The Council unanimously adopted a resolution that any public meeting at any future annual session of the Indiana State Medical Association be under the direction and control of the Indiana State Medical Association, the selection of speakers, the arrangements, and the entire public meeting being under the auspices of the State Association, and the Budget Committee being instructed that an item be allowed in the budget for the expense of such a meeting not to exceed $500.00.

The Council went on record approving the publication of the certified list of physicians which now appears in THE JOURNAL.

The conflict of annual spring district meetings was decried. It was suggested that all councilors send the dates of their district meetings, just as soon as these dates are selected, to headquarters office. Each councilor was asked to send the name of the president and the secretary of his district society to the headquarters office immediately upon election.

Under the head of new business a motion was made that the chairman appoint a committee to be composed of the chairman and two other members of the Council to draw up a contract to obtain between the editor of THE JOURNAL and the Indiana State Medical Association and to submit this at the next midwinter meeting of the Council.

Second Meeting, Fort Wayne, September 25, 1930

Ten of the thirteen councilors were present, along with the president of the Association. All matters of business were tabled until the midwinter meeting.

Midwinter Meeting, Indianapolis, December 3, 1930

Eleven members of the Council, along with the retiring president, president-elect for 1931, president-elect for 1932, treasurer of the Association, editor of THE JOURNAL, the attorney of the Association, and the executive secretary, were present.

Informal reports of the councilors showed every district in good condition, councilors for the Third, Seventh, Ninth, Eleventh and Thirteenth Districts reporting especially fine district meetings.

Reports of officers received, the treasurer speaking of the fine financial condition of the Association, the surplus on hand on November 30, 1930, being $30,226.67.

Under unfinished business the Ninth District case was brought up for discussion. The matter was re-referred to the councilor of the Ninth District with the express wish of the Council that this case be adjudicated before December 31, 1930, and "that it is the sense of this Council that Dr..... is a member in good standing in the ..... County Medical Society at this time." (This case finally settled before the Executive Committee in January, 1931.)

Detailed report received by the Council of special committee composed of Drs. Keeney, Padgett and Shanklin, in regard to THE JOURNAL contract. The report of the committee was accepted and the committee discharged.

Preliminary report upon arrangements and accommodations for annual session at Indianapolis received by Council.

Reports of the chairmen of the various standing committees received.

Merger of Franklin and Fayette County Medical Societies approved by Council.

Movement to introduce legislation allowing physicians liens in automobile accident cases started by Council. Legislative Committee instructed to take this matter up with the legislature.

The Council went on record approving the suggestion of William R. Davidson, past president of the Association, that the districts of the State Association remain as they are at the present time, irrespective of change in congressional districts.

Resolution introduced for the appointment of a special committee to change the Constitution and By-laws providing for the annual election of a speaker and vice-speaker of the House of Delegates and devising ways and means for simplifying roll call of the House of Delegates. Chairman appointed Drs. Shanklin, Alexander and Austin as members of this special committee. For detailed report of this committee see report of Executive Committee.

Resolution introduced that the Council of the Indiana State Medical Association ask the Indiana Tuberculosis Association to require that each patient applying for examination in a tuberculosis clinic come with a request from a physician for such an examination. (Letter to this effect sent to secretary of Tuberculosis Association. For letter and answer see Executive Committee minutes.)

Upon request of the director of the Bureau of Legal Medicine and Legislation of the American Medical Association, the Indiana State Medical Association was asked to cooperate with the Federal Government in the enforcement of narcotic drug laws. This request approved by Council.

Following a discussion upon the need of postgraduate work in Indiana, a committee of three, composed of Dr. Keeney, Dr. Rogers and Dr. Hare, was appointed to investigate postgraduate work in other states and plan a course and make a report to the Executive Committee of the State Association in regard to a program for such instructional courses for Indiana.

Dr. David Ross and Dr. William H. Kennedy were re-elected unanimously members of the Executive Committee for 1931. Dr. E. E. Padgett, of Indianapolis, was re-elected chairman of the Council for 1931.

New Business to Come Before Council at Meeting September 23, 1931

Resolution to be presented by Dr. Romberger, councilor of the Ninth District:

"WHEREAS, The District Medical Societies are com-

ponent parts of the State Medical Organization; and,

"WHEREAS, The welfare of these district medical societies bears an important relation to the welfare of the parent organization, the State Society; and,

"WHEREAS, During the past several years there has been an increasing interest taken in the annual district meetings by the members of those districts; and,

"WHEREAS, It has become increasingly more expensive from year to year to satisfy the demands for high grade programs at these district meetings; and,

"WHEREAS, The sole revenue in the hands of the district treasury comes from the local societies of the district; and,

"WHEREAS, This matter was discussed at the Ninth District Meeting held in Lebanon May 28, 1931, and the councilor for said district was given specific instructions to lay this matter before the Council of the State Medical Association; and,

"WHEREAS, The treasury of the State Medical Association has a growing surplus;

"THEREFORE, I move the sum of 25 cents per paid-up member of each district be paid annually from the general funds of the State Association to the treasurer of the respective districts, these moneys to be used for assistance in putting on the programs of the district meetings."

Respectfully submitted,

E. E. PADGETT,
Chairman of the Council.

REPORTS OF COUNCILOR DISTRICTS

First Councilor District

The First District has continued during the past year in about the usual manner. The counties are all organized and meet with more or less regularity. The smaller societies, of course, have some difficulty and do not hold such regular meetings. I do not feel that they are to be blamed for this and think that it is the wisest course.

Gibson County has a society which is quite active and is having regular and good meetings which are well attended. The Vanderburgh County Society has met monthly and has had excellent programs.

JOHN H. HARE, Councilor.

Second Councilor District

The Second Councilor District reports briefly: Organizations and memberships practically unchanged. It is gratifying to note that the young men in the area almost to a man unite with their local society.

The profession has suddenly met with an attractive, enticing and insidious competitor. The drought is a strong ally and a clever excuse. The U. S. Public Health organization insists on socializing southern Indiana doctors. With philanthropy as a "hands-off cloak", your "Uncle Sam" is hoping to give away biologicals to *everybody* and "kid" the medical profession into doing the work for practically nothing. "Uncle Sam" has been very successful with the Indiana Board of Health; the Indiana Board of Health has been "kidded" into doing all the heavy lifting.

The Second District has not been an entire sucker. Those counties that have will regret it. Bureaucracy once established must advance—grow and grasp—or there is no increase in jobs. Weakness—helplessness, sickness—they all invite socialism. Queer that the rich man and the politician, both of whom fear and hate socialism, are always advancing it through and at the expense of the medical profession.

H. C. WADSWORTH, M.D., Councilor.

Third Councilor District

Councilor of the Third District has nothing of special importance to report, except the county societies are moving along in their usual trend and that we are having two good district meetings each year with especially good programs and splendid attendance.

Many members are anxious to know if there will be any change in our district boundary; they all seem desirous that there be none.

W. J. LEACH, Councilor.

Fourth Councilor District

In making my annual report of conditions in the Fourth Councilor District I have very little of importance to report. Our county societies are not very active during the summer months, most of them dispensing with meetings during July and August.

At the annual meeting of the Fourth District at Madison this spring, the House of Delegates voted unanimously that their councilor should express a desire that the Fourth Councilor District remain as it is at present and to oppose any effort to rearrange the district according to the new political changes.

H. P. GRAESSLE, Councilor.

Fifth Councilor District

Both the Fifth District as a whole and the individual county societies composing it, in spite of the financial and industrial depression, can report an extremely active and successful year.

The fall meeting of the Fifth District Society was held at the Vermillion County Hospital in Clinton, Indiana. At this meeting Dr. Frank W. Cregor, of Indianapolis, addressed the society on "The Relationship of the Indiana State Medical Association to the Medical Profession of Indiana". I. M. Casebeer, of Clinton, was elected president, Dr. E. I. Green, of St. Bernice, vice-president, and Dr. F. E. Sayres, of Terre Haute, secretary.

The spring meeting was held on May 1st in conjunction with the Vigo County Medical Society and the Terre Haute Academy of Medicine, at Terre Haute. The guest of honor was Dr. John A. Key, of St. Louis.

At this time a resolution was passed indorsing Dr. J. H. Weinstein, of Terre Haute, for president-elect of the Indiana State Medical Association at the 1931 meeting in Indianapolis. Dr. Weinstein has taken an extremely prominent part in the State Association for the past thirty years, and was a member of the Council from the time of its inception up until his voluntary resignation in 1929. The Fifth District feels that he is more than deserving of this recognition from the State Association.

The Clay County Medical Society reports a paid-up membership of nineteen out of a possible twenty-one in the county. This county society has been extremely active throughout the year. The meetings are held regularly on the third Thursday of each month at the Clay County Hospital. Attendance has been excellent.

The Parke-Vermillion Society and the Putnam County Society have not held regular meetings, however the members of these societies have been attending the various medical meetings in nearby cities.

The Vigo County Medical Society, for the first time in its history, with a paid-up membership of one hundred and twenty-six, will be entitled to three delegates at the state meeting. This paid-up membership of one hundred and twenty-six represents the entire eligible list of Vigo county. The meetings of this county are clinical meetings and are held alternately each month, as in the past, at St. Anthony's Hospital and Union Hospital with an average attendance of sixty.

The problem of treatment of the indigent poor has been presenting itself in various parts of the district, particularly in Clinton township of Vermillion county. The doctors of this township have recently perfected a township organization and are preparing to enter into a contract with the Township Trustee for this work in the township. A meeting was held recently in Clinton with reference to this matter, which was attended by Dr. William Kennedy, acting chairman of the Executive Committee of the State Association; Dr. E. E. Padgett, chairman of the Council, and Mr. Thomas A. Hendricks, executive secretary, together with the councilor of the Fifth District, at which the proposed contract was discussed.

O. O. ALEXANDER, Councilor.

Sixth Councilor District

On May 28th at Magnesia Springs, near Brookville, our district held its annual meeting with a splendid attendance. Dr. George Bond, of Indianapolis, on "The Heart Beat" with an interesting sound demonstration; Dr. Charles R. Sowder, of Indianapolis, on "Hypothyroidism"; and Dr. Bayard G. Keeney, of Shelbyville, on "Biology of Kidney Function" constituted the program.

Every county reported well-attended programs this year.

BAYARD G. KEENEY, Councilor.

Seventh Councilor District

Counties—Marion, Hendricks, Morgan and Johnson. Medical affairs have progressed smoothly in this district during the past year. Regular meetings have been held in three counties, while in the fourth, Johnson county, the organization is maintained and meetings held only on call of the officers.

There has been a slight gain in membership in this district during the past year.

There has been some litigation in regard to irregular or cult followers trying to secure license, or to practice without license. The decisions in the main in these cases have been favorable to organized medicine.

No case of violation of ethics among the regular profession in this district have been brought to the attention of the Council in the past year.

Our annual meeting, held this year in Indianapolis, was very well attended. We attribute this partly to the fact that we deviated a little in the nature of our program. The afternoon was devoted to clinics and papers presented by able clinicians from outside of the state, and the evening to a dinner and an address on a scientific subject, also provided by an outside speaker. There is a definite increase in the interest shown in our yearly meetings.

E. E. PADGETT, Councilor.

Eighth Councilor District

The four societies in this district have held regular meetings and have had their usual excellent programs and good attendance. No special matters have occurred requiring official notice and we feel that no district in the state has a more loyal membership in the county and state societies.

M. A. AUSTIN, Councilor.

Ninth Councilor District

The past year has been a very prosperous and successful year for the Ninth Councilor District. Every county society has been active; there has been an increased interest in attendance at the respective meetings, and a gain in membership is noted.

The outstanding feature of the year was a highly successful district meeting held in Lebanon, Boone county, May 28th. The revived and re-enthused Boone County Society did itself proud on this occasion. Especially worthy of commendation were the efforts of District President Dr. Williams and district secretary, Dr. Owsley.

F. T. ROMBERGER, Councilor.

Tenth Councilor District

The most important announcement from the Tenth is the fact that we have rejuvenated our meetings, which seemed to have been lagging a bit. The entire credit for this lies with a group of Indiana University men who came up to present the program for the May meeting. President Graham, together with Drs. Gatch, Moore and Rice, certainly did put on some show. The October meeting, at Hammond, promises much and we expect soon to challenge the slogan of the Eleventh District—"The Best in the State".

Component societies seem to be going along nicely, though Lake county has had some difficulties anent poor relief. Our September meeting will be devoted to a discussion of plans looking toward some settlement of the vexatious question. The local press has had some uncomplimentary things to say about us, but we believe we have our newspaper friendes placated—at least for the time being.

The general business depression has hit us amidship, but we are looking forward to better days.

E. M. SHANKLIN, Councilor.

Eleventh Councilor District

The following counties make up the Eleventh Councilor District: Carroll, Cass, Grant, Howard, Huntington, Miami and Wabash. Each county has its separate county medical society. Each society meets ten or more times per year. In five of the counties the societies meet each month.

The district association meets twice per year and has an enviable record of well-attended and interesting meetings. The meetings rotate so that each county entertains the district association in its turn.

Every county medical society in the district is doing good work and some are doing excellent work. There are a very few eligible physicians in the district who are not society members.

Sixteen of the members living in Marion have organized the Doctors Study Club, which meets twice per month. All programs are produced by the members. The Doctors Study Club has proved a great success and its progress is worth noting by other medical groups.

E. O. HARROLD, Councilor.

Twelfth Councilor District

The Twelfth Councilor District reports that the component societies show no changes in last year. Our district meeting in May was well attended and the program was very good.

E. M. VANBUSKIRK, Councilor.

Thirteenth Councilor District

I have very little to report of the Thirteenth District. There have been some unusually good meetings in St. Joseph County; also several excellent meetings in LaPorte county. Of the other counties I am sorry to say I cannot report as I have not visited any of them.

J. B. ROGERS, Councilor.

REPORT OF EXECUTIVE COMMITTEE

House of Delegates and Council, Indiana State Medical Association:

Gentlemen:

I INTRODUCTION.

Sincere regret over the death of Dr. David Ross, who for the greater part of this year and for so many past years served as chairman of the Executive Committee, marks this report with an air of sadness which otherwise would be outstanding for its feeling of optimism. For the last four years Dr. Ross served as chairman of the Executive Committee and as such deserves much of the credit for the policies, activities, and sound condition in which the Association finds itself at the present time. We, members of the committee, who served with him from year to year and day to day, take this opportunity of voicing our sincere feeling for one with whom we had the pleasure of working. He leaves a tradition which your committee will do its best to carry on.

II ADMINISTRATIVE AND EXECUTIVE ACTIVITIES.

1. *Membership Report:* Despite the depression the number of members of the Indiana State Medical Association is greater this year than in any years past.

Number of members July 31, 1927	2,632
Number of members July 31, 1928	2,678
Number of members July 31, 1929	2,690
Number of members July 31, 1930	2,690
Number of members July 31, 1931	2,729
Number of physicians in Indiana in 1927 according to A. M. A. directory	4,164

Number of physicians in Indiana in 1929 according to A. M. A. directory 4,102
Number of physicians in Indiana in 1931 according to A. M. A. directory 4,073

These figures show that the gap occupied by non-members is rapidly closing in Indiana. Despite the fact that there are twenty-nine physicians less in Indiana today than two years ago, there has been a gain in membership in the Association of thirty-nine members. This means that nearly all the younger men who start practice in the state become members of the Association.

2. *Matters Referred to Committee by House of Delegates at 1930 Session:*

(1) Report of special committee composed of E. M. Shanklin, M.D., O. O. Alexander, M.D., and M. A. Austin, M.D., in regard to changes in the Constitution creating a speaker at the House of Delegates. The proposed changes follow:

A. As to the Constitution:

"I present the following resolution for the change of the Constitution of this Association and move that it be published twice during the ensuing year in THE JOURNAL of this Association, and that the question of the adoption of it as an Amendment to the Constitution be made a special order of business of the House of Delegates at the next annual session:

"BE IT RESOLVED, That Article IX of the Constitution of the Indiana State Medical Association be amended to read as follows:

"The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, a Speaker and a Vice-speaker of the House of Delegates, and thirteen Councilors."

B. As to the By-laws:

"I present the following resolution for the Amendment of the By-laws and move that the question of the adoption of this resolution be made a special order of business at the next annual session following the action of the House of Delegates on the resolution to amend the Constitution:

"BE IT RESOLVED, That Section 1 of Chapter VI of the By-laws of this Association be amended by striking out the following words: 'and of the House of Delegates,' in the second and third lines of said section; and that Chapter VI be further amended by adding an additional section thereto following Section 4 and preceding Section 5, which said section shall be designated as Section 4-a, and shall read as follows:

"The Speaker of the House of Delegates shall preside at all meetings of the House of Delegates and shall perform such duties as presiding officer as custom and parliamentary usages require. He shall have the right to vote only when his vote shall be necessary to decide.

"The Vice-speaker of the House of Delegates shall perform the duties of the Speaker in the latter's absence or at his request.

"In case of death, resignation or removal of the Speaker the Vice-speaker shall succeed him in office and officiate during the unexpired part of the term to which the Speaker was elected."

3. *Locations for Physicians:* For five years the Executive Committee has maintained a list of possible openings to physicians in Indiana. A number of communities in Indiana exist where physicians are needed badly. A list of these communities has been prepared at headquarters office containing detailed information as to population, industries and general character. This list, which is kept as up-to-date as possible, is available to any physician who may be interested in gaining information concerning a new location. The committee always is pleased to supply this information to any physician requesting it and it will be glad to receive the names of any communities where medical services are needed.

4. *Legal Medical Column in* JOURNAL: Albert Stump, attorney for the Association, continued during the past year to conduct a legal medical column each month in THE JOURNAL under the direction of the Executive Committee. In this column Mr. Stump answers inquiries concerning the legal aspect of many subjects of vital interest and importance to the physician. If any member of the Association has any legal medical questions to which he may desire an answer, Mr. Stump will be very pleased to answer these questions.

5. *Cooperation with Indiana Tuberculosis Commission:* The Executive Committee formally endorsed on behalf of the Indiana State Medical Association the report of the Indiana Tuberculosis Commission appointed by Governor Leslie and united with the Commission in its efforts to get legislative action. The legislation introduced by the Commission, however, failed.

6. *Affiliation of Dentists with Local Medical Societies:* Reports were brought to the attention of the Executive Committee from time to time during the year of several counties where members of the local dental society and the local medical society were holding joint meetings. The Constitution of the Indiana State Medical Association states in Article IV, Section 4, under the heading, "Associate Members": "Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association." The officers of the Indiana State Dental Association report that at the 1931 meeting of the State Dental Association similar courtesy was given the members of the Indiana State Medical Association. The committee expresses its appreciation to the Dental Association for this demonstration of friendly feeling between the two professions.

7. *Postgraduate Work:* The Executive Committee gave much time and thought to the discussion of a possible postgraduate course. Many complications arose which prevented such a course being held in 1931.

8. *Summer Round-up of Children:* Approval of the summer round-up of children, a project promoted by the Indiana Congress of Parents and Teachers, was given by the Executive Committee. This project was designed to promote the education of parents to the need for periodic health examinations of children by family physicians and dentists. The movement did not advocate free dental or medical services except to the indigent, but referred the child directly to its own doctor or dentist. The Executive Committee gave its approval with the understanding, of course, that it had no authority over the local county medical societies in matters of this nature.

9. *Resolution Against Changing Councilor Districts:* The Fourth and Sixth districts have gone on record opposing any effort to redistrict the councilor districts of the state to correspond with the new congressional districts. In accordance with this Dr. William R. Davidson, of Evansville, suggested the following resolution:

"WHEREAS, The Legislature of 1931 was required to change the congressional districts of the state in accordance with the act of Congress of the United States,

"BE IT RESOLVED, by the House of Delegates of this Association, That the Councilor Districts as at present constituted, shall be unchanged."

This resolution was brought to the attention of the Executive Committee and the Council and is passed on to the House of Delegates with a favorable recommendation for formal action. The councilor districts of the Indiana State Medical Association did not correspond exactly with the old congressional districts and there is nothing in the Constitution and By-laws which would make such conformity necessary.

10. *Resolution Against Giving Gratuitous Medical Information to Insurance Companies:* Resolution against the continuation of this practice was passed at the annual session of the House of Delegates of the American Medical Association. The Executive Committee of the Indiana State Medical Association went on record requesting the delegates of the Indiana State Medical Association to support this resolution. The resolution, which was presented by Dr. J. D. Brook, delegate from Michigan, follows:

"WHEREAS, The Michigan State Medical Society, through its committee on Civic and Industrial Relations, has made a comprehensive study of the question of filling out claim proofs of health and accident insurance com-

panies; that this study has extended over a period of three years and has involved an extensive analysis of the subject, including a conference with representatives of several outstanding insurance companies; and that, as a result of such study and conference, the Michigan State Medical Society has adopted suitable resolutions providing for the charging of a fee to the insurance companies of not less than $2.00 for filling out each preliminary and final claim proof, and

"WHEREAS, The Michigan State Medical Society, by its action in adopting such resolutions, has created the interest and favor of other state medical societies in the question, which equally affects every other state medical society; and that the Michigan State Medical Society has met with considerable opposition from the insurance companies, for the reason that they object strenuously to the plan, and point out that Michigan represents only a small section of the nation and should not undertake a project affecting the policy of all the insurance companies of the United States, and

"WHEREAS, The rights and privileges of the individual physicians of the entire United States are involved and are being encroached upon by the health and accident insurance companies which are continuing to insist that the services of the physician in filling out claim proofs are part of the physician's professional obligation to his patient; that the insurance companies are unwilling to concede that the information given to them is for their own statistical use in properly adjusting claims; and that they are unwilling to pay the physician his fee, therefore

"Be It Resolved, That the House of Delegates of the American Medical Association concur with and approve the action of the Michigan State Medical Society in adopting resolutions providing for the charging of a fee of not less than $2.00 for each preliminary and final claim proof; and that the House of Delegates of the American Medical Association authorize its Speaker to appoint a committee to whom this problem shall be referred;

"Further, That this committee be instructed to study the facts and factors involved and to formulate a national policy that will result in remunerating physicians and surgeons for their services to insurance companies, when rendering these reports that contain expert opinions and professional advice,

"And Further, That the Committee of the Association shall make a full report and recommendation at the next annual meeting of the House of Delegates of the American Medical Association."

11. *Medical Reserve Resolution from California State Medical Association:* The Executive Committee went on record requesting the House of Delegates of the Indiana State Medical Association to ratify this resolution. The resolution follows:

"WHEREAS, The present Army regulations require that every medical reserve officer shall, during each five years' commission period, put in two hundred hours of military work, in camp, correspondence school, in active training meetings, or similar military activity, or else become ineligible for renewal of his commission with assignment to an Organized Reserve Unit, and therefore revert to the 'Auxiliary Reserve' in time of peace; and

"WHEREAS, There are many highly trained, highly skilled, and very active physicians who, as reserve officers, have been assigned as chiefs and assistant chiefs of surgical, medical, laboratory, roentgen and other distinctly professional services, and in positions requiring special technical skill such as is usually possessed by specialists, carrying very little administrative responsibility, and whose professional duties in busy private lives make them especially well fitted for their duties in their army assignments, but whose same duties make it practically impossible for them to carry on military work in time of peace; and

"WHEREAS, Many of these men and their valuable attainments are being lost to the Organized Reserve, although they are willing and anxious to serve their country in time of need and do not aspire to advancement in grade,

"Therefore, Be It Resolved, That the California Medical Association, desiring that the medical profession may be of the greatest service to our country, respectfully suggest that the best interests of the military service might be enhanced if the regulations regarding the Organized Reserve were changed to provide for the recommission and reassignment of officers holding assignments such as those mentioned in the second paragraph, even though they may not have completed the required amount of military work, and hereby recommend consideration of such change; and further

"Be It Resolved, That a copy of this resolution be sent to the Corps Surgeon and the Commanding General of the Ninth Corps Area, and the Surgeon General of the Army, the officer in charge of Organized Reserves, the Adjutant General of the Army, the Chief of Staff of the Army, and the secretary of each state medical association."

12. *Tuberculosis Clinics:* The Council, at its midwinter meeting in December, took action in regard to the holding of tuberculosis clinics. A letter was written to the executive secretary of the Indiana Tuberculosis Association informing him of the action of the Council, and the following answer was received:

"Your letter of December 24 relative to the action of the Council regarding the holding of clinics was presented to our Executive Committee at its meeting on January 14.

"The Indiana Tuberculosis Association does not conduct clinics, but these are held by the county tuberculosis associations as a part of their respective programs. The State Association serves in an advisory capacity to the local groups, counsels with them, helps in formulating local programs, and suggests methods of procedure. The State Association has always endeavored to raise ethical standards entering into the conduct of clinics, and in fact urges them upon the local associations the observance of ethics in its relation to the medical profession. The Executive Committee of the State Tuberculosis Association has directed me to advise you that we will give the matter in question serious thought and will endeavor to devise some plan that will be mutually satisfactory."

Nothing further has been heard from the Tuberculosis Association. A bulletin in regard to this matter was sent, by order of the Executive Committee, to each of the councilors when the matter was under consideration.

13. *Enforcement of Medical Practice Act:* The Executive Committee through the attorney of the Association assisted the State Board of Medical Registration and Examination in cases where drugless healers who had been refused a state license were attempting to mandate the Board to issue them a license. Several drugless healers had appeared during the year before Judge Leathers who previously had been refused a license by the State Board of Medical Registration and Examination and the court had mandated the State Board to issue them a license. In the past these cases have been defaulted by the Board. The point in question is of a technical legal nature concerning the construction of the law in regard to certain drugless healers who were in practice in the state previous to the passage of the law in 1927 but who had not graduated from a drugless school until after the law was passed. Albert Stump, attorney for the Association, is aiding the State Board of Medical Registration and Examination to make a test case in regard to the 1927 law. (This has nothing whatever to do with the section of the statute which makes it necessary for a drugless healer to undergo the same requirements as do all physicians and osteopaths to get a license to practice in Indiana.) The refusal of the Indiana State Board of Medical Registration and Examination to examine Bryant E. Pitzer, a graduate of the Lincoln Chiropractic School of Indiana was sustained by Judge Joseph R. Williams in a test case in the Marion County Superior Court on April 1. Pitzer attempted to force the Board to give him an examination to practice in Indiana. On

April 7 Pitzer named the State Board of Medical Registration and Examination the defendant in a mandamus action to force the Board to issue him a license to practice chiropractic. This action was brought by William H. Faust, attorney for the chiropractic association. The court has not yet ruled upon this last action by Pitzer's attorney.

14. *Complaint Against Letter Sent Out by Methodist Hospital:* Complaint was brought before the Executive Committee concerning a letter which was alleged to be unprofessional in character sent out by the Methodist Hospital in Indianapolis. Upon invitation, Arthur Brown, Sr., representing the Board of Trustees of the Methodist Hospital, attended a meeting of the Executive Committee of the Indiana State Medical Association and stated that letters such as complained of would not be sent in the future. Mr. Brown expressed regret that anything had been said in the letter which was objectionable to the medical profession. He assured the Committee that this would not happen again. Mr. Brown stated that the letter was intended to convey to the medical profession of Indiana the fact that the Methodist Hospital was well equipped to take care of patients, a great many of whom were going outside of the state, to Mayos, the Ford Hospital at Detroit, etc. The subject of objectionable newspaper publicity on the part of the Methodist Hospital which had appeared in Indianapolis papers also was brought up. These articles to which there had been a great deal of objection showed pictures and gave names of physicians working in the new x-ray and physical therapy departments of the Methodist Hospital. Mr. Brown said that it was the ideal of the Board of Trustees of the Methodist Hospital to give the physicians of the state as perfect and as complete a place for their work as possible. The Committee told Mr. Brown that there was no objection to the Methodist Hospital receiving publicity as long as this publicity was not the type which was against the ethics and principles of the medical profession.

15. *Honorary Membership in State Association:* Many times the question has been placed before the Executive Committee in regard to honorary membership in the Indiana State Medical Association. Physicians often are voted as honorary members into their local societies, but until their state dues are paid such physicians lose their standing in the Indiana State Medical Association and the American Medical Association as the only way a man may become an honorary member of the Indiana State Medical Association is by a vote of the House of Delegates, and only those men can become candidates for an affiliate fellowship in the American Medical Association who are honorary members of their state association as well as their component society.

16. *Special Commendation for Secretary of Fort Wayne Medical Society:* The Executive Committee wishes to compliment Dr. L. P. Harshman, secretary of the Fort Wayne Medical Society for the thoroughness of the annual report of his local organization. Dr. Harshman gave a complete, detailed report such as could well be a model on which other secretaries could base their annual reports.

III MEDICAL DEFENSE ACTIVITIES.

1. *Detailed Report of Malpractice Cases Handled by Medical Defense Committee:* A year ago at the time of this report, August 1, 1930, the following thirteen cases were pending before the Committee, and the Committee reports the following progress on these thirteen cases:

No. 129—Case still pending. No action for several years. Probably can be dropped soon.

No. 140—Suit pending. Filed February, 1926. Word received May, 1929, "No further developments. Probably there will be none for some time."

No. 142—Suit pending but plaintiff not pressing suit.

No. 151—Case pending. Suit filed July, 1927. No new developments. Likely that suit will be dropped.

No. 155—Suit threatened but not filed. Probably never will be filed.

No. 156—Suit filed March 27, 1928. Pending. Outlook favorable to physician. Expense, $66.28, paid September 23, 1929. No further developments.

No. 162—Case pending.

No. 166—Suit filed March 12, 1929. Case still pending.

No. 167—Case dismissed with costs of the case taxed against the plaintiff, May 28, 1931. Expense, $100.00, paid June 18, 1931.

No. 168—Judgment for defendant. Expense, $150.00, paid March 3, 1931.

No. 169—Suit filed April, 1930. Case dismissed. Expense, $100.00, paid April 23, 1931.

No. 170—Suit filed June 2, 1930. Case pending.

No. 172—Suit filed April 9, 1930. Case pending.

Since August 1, 1930, and up to August 1, 1931, the following new cases have come before the Committee:

No. 171—Suit filed August 16, 1930. Case pending.

No. 173—Suit filed October, 1930. Case pending.

No. 174—Suit filed May, 1930. (Case reported late to headquarters office.) Case settled by compromise out of court October, 1930. Amount paid in defense, $100.00.

No. 175—Suit filed December, 1930. Case pending.

No. 176—Suit filed March 28, 1931. Case pending.

No. 177—Suit filed February, 1931. Case pending.

No. 178—Suit filed June, 1931. Pending.

No. 179—Suit filed February 1, 1931. Compromise refused by defendant. Case pending.

The total cost of medical defense from August 1, 1930, to August 1, 1931, was $450.00. For the year preceding the cost was $516.28.

IV CONCLUSION.

No report of the Executive Committee could be complete without a mention of the faithful services rendered the Association by William A. Doeppers, M.D., who, after serving since 1925 as treasurer of the Association, has handed in his resignation due to the fact that he has taken over the medical directorship of one of the leading pharmaceutical houses of the country. Succeeding Charles N. Combs, M.D., of Terre Haute, who served the Association so faithfully for so long a time as secretary-treasurer, Dr. Doeppers for six years has given his services free of charge to the Association. As treasurer he has kept the funds of the Association under the direction of the Executive Committee. He has attended regularly each of the monthly Executive Committee meetings and the midwinter Council meetings. In this capacity he has had much influence in shaping the policies of the Association. It was due to him that the Association established a system of having an expert accountant annually check the books of the Association. Under the direction of an expert accountant Dr. Doeppers also set up an absolutely modern and up-to-date method of bookkeeping for the Association. His good fellowship, his constant flow of humor, combined with his painstaking care of his duties and his interest in the general welfare of the Indiana State Medical Association will make his position hard to fill.

Respectfully submitted,

WILLIAM H. KENNEDY,
Acting Chairman;
A. B. GRAHAM,
E. E. PADGETT,
A. E. BULSON.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association:
Gentlemen:

I INTRODUCTION.

A summarized report of the activities of your Legislative Committee was made upon March 27, 1931, and appeared in the April number of THE JOURNAL, following the adjournment of the 1931 General Assembly. From this a summary was made of all bills of special interest to the medical profession that were introduced in the legislature. To sum up the entire matter, as far as legislative action is concerned the professional status of the

physician in active practice is not changed a bit by any action of the 1931 General Assembly.

II LOCAL LEGISLATION.

Lien Bill in Automobile Accident Cases: A big disappointment to the profession was the fact that the lien bill in automobile accident cases in which the profession was interested was caught in the last-minute Senate jam due to the fact that it was not handed down until near the close of the session by the speaker of the House and hence failed to pass. When this bill was handed down finally by the speaker, it passed overwhelmingly 83 to 7, and your Committee was confident that there were enough votes in the Senate to pass the bill had time permitted. This bill, if enacted, would have relieved, to a degree, physicians, nurses and hospitals from losses suffered for services rendered but not paid for in automobile accident cases. Your Committee urges the Committee on Civic and Industrial Relations to meet with representatives of the leading insurance companies (who in one way or another opposed this bill) to establish a better understanding in these cases. It is hoped that an understanding may be obtained with the insurance companies for settlement in these cases before the next legislature convenes. However, if such arrangements cannot be made with the insurance companies, your Legislative Committee will be prepared to begin the battle all over again in 1933 for this much needed legislation.

Other Major Bills of Interest to the Profession:

1. The "full-time health officer" bill did not get out of committee.
2. The tuberculosis sanatoria bill was defeated in the House, where it was introduced. This bill had the support of the State Association but received opposition from several individual medical groups.
3. Bills changing present laws in regard to medicinal liquor were defeated. Your Committee took no part whatever in this battle, which, to say the least, was vigorous.
4. The bill providing for annual re-registration of nurses passed.
5. Bill giving dentists an injunction similar to the one contained in the medical law passed. (The dental bill had to be amended artistically so as to do away with objections of the advertising dentists before it was passed.)

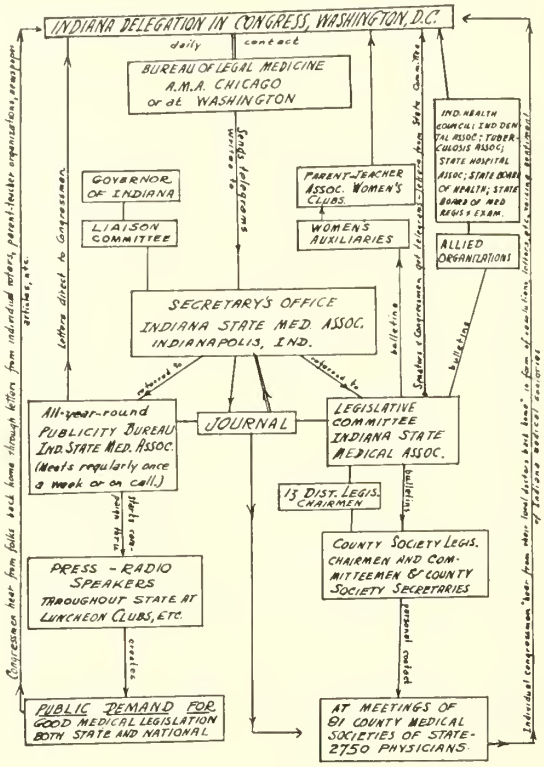
No Cult Legislation: The outstanding feature of the legislature so far as the medical profession is concerned is the fact that this was the first time in more than a decade that the cultists did not attempt some legislation. This fact alone shows the strong position of the medical profession in legislative circles.

III NATIONAL LEGISLATION.

Your Legislative Committee, under the direction of the Bureau of Legal Medicine and Legislation of the American Medical Association carried on a concerted campaign against the re-enactment of Sheppard-Townerism by the last Congress. It used to the best of its ability every legitimate means to bring the press and the people of Indiana to a full understanding of such paternalistic measures as the Jones-Cooper bill. After passing the United States Senate this bill failed to become a law as it was caught in the jam in the House of Representatives. It had the administration backing and undoubtedly, under one form or another, will be brought before the next Congress.

IV COMMENDATION OF THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION.

At the annual session of the American Medical Association in Detroit a special committee was appointed to make a survey into the legislative activities of the various state medical societies and to find out what methods the state societies were taking to cooperate with Dr. William C. Woodward, director of the Bureau of Legal Medicine and Legislation of the American Medical Association. This special committee asked the legislative committee of each state society to make a report upon this matter. Your Committee answered this request, submitting an eight-page report, the accompanying diagram giving a general conception as to how matters in reference to national legislation are handled in Indiana.



In making his report to the House of Delegates at the annual meeting of the American Medical Association at Philadelphia this past June, Dr. C. B. Wright, of Minnesota, chairman of the Committee, commented as follows upon the Indiana report:

"Many of the states show by their reports evidence of great interest in this subject and have made suggestions that require special comment. There were some excellent reports, and I would like to mention particularly the report of the secretary of the Indiana State Medical Association. He gave us in great detail their methods of organization and of cooperation with the Bureau of Legal Medicine and Legislation. They maintain close contact with members of Congress, have a strong tie-up with newspapers by a newspaper man who handles publicity, and keep in close contact with Dr. Woodward."

Later the following letter was received from Dr. Wright:

"Would you permit me to use copies of your report for the guidance of state associations that are trying to organize for legislative work?

"You have graphically and very completely outlined a method which I believe is being used by several states with variations. Of course only the first part of your report would be used and it would only be sent to some officers of a state medical association or some key-man in the state asking for advice. I have such a request from New Jersey. I would like to call it 'The Indiana Plan'."

It was with pleasure that the Legislative Committee and the headquarters office complied with the request in the above letter and will continue to cooperate with the American Medical Association and its constituent societies insofar as is possible.

V RECOMMENDATIONS FOR THE FUTURE.

Your Committee recommends:

1. That the Civic and Industrial Relations Committee

make every effort possible to contact the insurance men in order that the injustice done to physicians in automobile accident cases may be rectified perhaps without taking it up to the legislature;

2. That despite the fact that 1932 will be an "off" legislative year that each county society appoint its legislative committee to cooperate with the state Legislative Committee.

3. Word has come to the Committee that a group of the cultists is outlining a program for a concerted drive to get speakers before luncheon and civic clubs throughout the state to arouse sentiment for the creation of a separate board which will give graduates of cult schools special privileges and allow them to be licensed in Indiana with lower qualifications than necessary for doctors of medicine and osteopaths. This movement contemplates the election of a block of cultists and their sympathizers at the next legislature. Your Committee urges vigilance by physicians.

Respectfully submitted.

JOHN H. HEWITT, Chairman,
O. T. SCAMAHORN,
W. F. CARVER,
WALTER F. KELLY,
A. A. YOUNG,
GEORGE E. DENNY,
M. F. JOHNSTON,
L. J. DANIELESKI.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND HOSPITALIZATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—It is the opinion of the committee that its chief function lies in the direction of improving the educational facilities and opportunities of the graduate physician rather than the undergraduate.

Undergraduate medical education is in the hands of medical colleges and our universities who must be relied upon to direct and control it.

Graduate medical education which is much the larger field is not well organized and is greatly in need of a more centralized leadership than now exists.

The following educational activities seem to be open to the graduate physician:

1. Regular Medical Society Meetings.
2. Clinics.
3. Postgraduate Courses.
4. Reading.

(1) Our regular county medical societies are or should be a potent source of medical education for the rank and file of practicing physicians. The failure of county medical societies to meet the educational aspirations and needs of their members is probably responsible for the organization of academies, study clubs, etc., which has occurred in recent years over the state.

(2) The holding of short series of clinics in various centers over the state to which physicians of adjacent territory are invited and at which practical medical subjects are presented should be encouraged.

(3) Reading as a source of graduate education offers the most fertile field for development. It can be safely said that no physician is without the means of self-education if he will use his opportunities presented by medical literature. This field should be encouraged in every possible manner and as a step in this direction the committee has made inquiry on the feasibility of establishing a package library system conducted by the University. If this can be done it should prove of great help in forwarding the cause of graduate medical education.

(4) Postgraduate courses are mentioned in this report only to emphasize the point that reliance on such courses to meet the demand of graduate medical education is entirely a mistake for such courses are inadequate. Only a few attend them and they are designed to meet the requirements of the specialist. The greatest need today in medical education is to raise the level of graduate medical practice as it pertains to the great body of medical practitioners.

MURRAY N. HADLEY, Chairman,
WALTER C. MCFADDEN,
W. R. DAVIDSON.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association:

Gentlemen:

Introductory Note:

The following letter has been received from Dr. George G. Richardson who, as chairman of the Committee on Necrology, has served the Association in that capacity for many years:

Letter:

"Davitt Hotel,
Lewisville, Indiana,
August 19, 1931.

"Mr. Thomas A. Hendricks,
Indianapolis, Indiana.

My Dear Mr. Hendricks:

"I am aware that the reports for THE JOURNAL are due to arrive in the editor's office. I have been sick for several months and have been away from home for some time seeking relief from many sources and am here at the above hotel trying to finish up sufficiently to return home and to work.

"At present it seems that I will not be able to be there in time to make the necrology report. This worries me greatly for I have enjoyed making the report and being thus somewhat identified with the state medical association of which I have been so proud.

"Could it be possible to have this report appear a little later when I get home and able to work?

"I hate so badly to give it up and feel sure that the time is not far distant when I will be well and able to carry on in the same old way.

"Though I do not wish in any way to interfere with the program, yet I have a very great ambition to continue my identification with the Indiana Medical Association.

"Let me have a line from you addressed here for I will have to remain here for a few more days.

"Sincerely yours,
(Signed) "DR. GEO. RICHARDSON."

Concluding Note:

Upon instruction of the Executive Committee a letter was written Dr. Richardson thanking him for his efficient service and stating that his report would be acceptable at a later date.

REPORT OF DIPHTHERIA PREVENTION COMMITTEE

House of Delegates, Indiana State Medical Association:

Gentlemen:—The Diphtheria Prevention Committee has continued the policy instituted last year, a policy of keeping the profession and the public informed concerning the presence of the disease in the state and various communities, and of urging the people to take advantage of the facilities of modern scientific medicine in the prevention, diagnosis and treatment of this disease. There has been no desire on the part of the committee to institute aggressive campaigns in the various communities. We have felt that such steps as may be needed in that regard had best be taken by the local medical profession. We have, however, been ready and willing to give such aid as the local medical profession might invite.

The committee during the past year has sponsored or accomplished the following:

1. Six papers have been published in the INDIANA STATE MEDICAL JOURNAL relative to the various phases of this disease. These papers have been written by as many physicians of the state who might be considered as authorities on the subjects treated.

2. Each month a careful analysis of the diphtheria situation has been made and published as a special article in THE JOURNAL. By this means the profession has been kept in touch with the situation.
3. An exhibit for the state medical meeting has been prepared showing where cases and deaths have been reported. Maps and graphs to the number of about thirty-five were prepared from data collected by the chairmen of the committee and furnished by the State Board of Health Department of Vital Statistics.
4. Numerous talks to women's clubs, luncheon clubs and other lay organizations have been made. Three medical societies have been addressed on the subject by members of the committee.
5. Four or five radio talks have been delivered on diphtheria prevention.

We are very glad to be able to report that last year (1930) had the lowest diphtheria death rate that has ever been attained in Indiana. This is all the more pleasing when we recall that our rate is already low as compared with surrounding states. The rate for 1929 was also the lowest up to that time. To date the deaths for 1931 (to and including July) is four deaths under that for the same period in 1930. We feel that the Committee deserves some portion of the credit for this showing.

There is also evidence that reporting of cases is being more conscientiously and thoroughly done than before the committee began to call attention to this matter. There is, however, some evidence that a good many cases of Vincent's angina are being reported as diphtheria. This is an important matter and great care must be taken to avoid the making of this mistake.

The committee continues to recommend that all children under ten years of age shall be given a process of immunization.

DIPHTHERIA PREVENTION COMMITTEE:

Thurman B. Rice, M.D., Chairman;
Ernest R. Carlo, M.D.,
Charles Bosenbury, M.D.

REPORT OF COMMITTEE ON SECRETARIES' CONFERENCE

House of Delegates, Indiana State Medical Association:

Gentlemen:—The Annual Secretaries' Conference was held May 26, 1931, at the Athenæum Club, Indianapolis, at 4:00 p. m.

Speakers for the afternoon session were Drs. C. A. Stayton, Indianapolis; J. C. Burkle, Lafayette; D. W. Schafer, Fort Wayne; V. L. Turley, Fowler; G. J. Geisler, South Bend; M. A. Austin, Anderson; A. M. Mitchell, Terre Haute.

A joint dinner meeting was held with the Indianapolis Medical Society, with Dr. Edmund Clark presiding. The speakers for the evening session were: Drs. A. E. Bulson, Fort Wayne; R. G. Leland, Director, Bureau Medical Economics, A. M. A., and Harry M. Hall, Wheeling, West Virginia.

There were forty secretaries and councilors present.

Dr. A. M. Mitchell was re-elected chairman.

Many economic problems were discussed with great benefit to all in attendance.

On behalf of the Committee I want to thank the Executive Committee, the Council and the county secretaries for their interest in the work of this Committee.

Respectfully submitted,
A. M. MITCHELL, Chairman.

REPORT OF BUREAU OF PUBLICITY

House of Delegates, Indiana State Medical Association:

Gentlemen:

I INTRODUCTORY REMARKS.

Since the organization of the Bureau of Publicity of the Indiana State Medical Association eight years ago the work of the Bureau has increased constantly, and the Bureau wishes here to express its gratification for the cordial reception its efforts have received. This year's report is indicative of the increasing volume of work coming before the Bureau.

During the past year the service of the Bureau has been greatly enlarged by the number of requests from individuals, libraries, newspapers and school officials to be placed upon the mailing list for the releases.

Throughout the year many letters have been received asking for complete details concerning the work of the Bureau of Publicity. Among those asking for information have been the Iowa State Medical Society, the Fulton County (Georgia) Medical Society, and the Indiana State Dental Society.

The scope of the Bureau's work is growing larger each year. Perhaps the best compliment to the work of the Bureau comes from R. G. Leland, M.D., director of the Bureau of Medical Economics of the American Medical Association, who comments in one of his letters to the Bureau, "If you do not know it already I wish to state that we are using many of the bulletins issued by the Indiana State Medical Association as a basis for our five-minute radio health talks."

II ACTIVITIES OF THE BUREAU IN COOPERATING WITH VARIOUS OUTSIDE PUBLIC HEALTH AGENCIES.

In accordance with the resolution passed four years ago by the House of Delegates, the Bureau has acted as a special committee to confer with similar committees appointed by voluntary health agencies on matters pertaining to the work of these public health organizations and their relation to the medical profession.

1. *Indiana and Marion County Tuberculosis Associations.* The Bureau of Publicity cooperated with the Madion County Tuberculosis Association by allowing this organization to use its radio time during the Christmas seal sale, also for two talks in connection with Child Health Week, May 2nd and May 9th.

2. The Bureau of Publicity approved the report calling for new legislation of the Indiana Tuberculosis Commission. The comment of the Bureau upon this report follows:

"The report of the Indiana Tuberculosis Commission is approved by the Bureau of Publicity of the Indiana State Medical Association as offering the ultimate sanatoria facilities desired in Indiana. It is noted that the southern half of the state is particularly in need of relief and it is recommended that sanatoria facilities be first provided there."

3. Indiana Child Health and Protection Conferences upon request was granted by the Bureau of Publicity its hour on the radio on two occasions. Upon the request of the Indiana Child Health Conference the following suggestions were made by the Bureau concerning the points that should be considered in regard to the health of the child at any conference held by this group:

(1) Value of annual examination of children by family physician.
(2) Vaccination against smallpox should be compulsory before starting school, and should be done by family physician.
(3) Vaccination against diphtheria should be done before age three by family physician.
(4) A uniform state pure milk law should be enacted.

4. Bureau represented at Annual Congress on Medical Education, Medical Licensure and Hospitals at Chicago February 17, 18 and 19. For report of the representative

of the Bureau see March JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

5. *Division of Infant and Child Hygiene, State Board of Health.* The Bureau of Publicity approved the suggestion of the director of the Division of Infant and Child Hygiene of the State Board of Health that contact men be appointed by each county medical society to confer with the director in working out the 1931 May Day program and the promotion of a definite year-round child hygiene program. The Bureau notified the director that any action referred to these contact men must first be referred to the Bureau of Publicity for approval in order that there may be unity of action and understanding.

6. *Committee on the Cost of Medical Care.* The Bureau of Publicity aided the Committee in making its survey in Shelby county and has carried on a great deal of correspondence with the Committee during the past year.

III ESTABLISHMENT OF DENTAL PUBLICITY SERVICE.

1. Contract between Indiana State Medical Association and Indiana State Dental Association—

"To further cooperation between the medical and dental professions of Indiana and to maintain pace with the constantly increasing public demand for authoritative knowledge on scientific subjects, arrangements have been made to broaden the scope of the work started seven years ago by the Bureau of Publicity of the Indiana State Medical Association by an additional news service through the Dental Health Council of the Indiana State Dental Association.

"Principal points of this agreement follow:

"I. The Health Council of the Indiana State Dental Association will prepare articles for publication giving facts about dentistry in language that the layman can understand and in a style that will be interesting and instructive from a news standpoint. The services of an experienced newspaper man, other than an employee of the Bureau of Publicity of the Indiana State Medical Association, will be obtained for this purpose. Each article is to be reviewed carefully by members of the Dental Health Council to make as sure as humanly possible that it is absolutely scientifically correct.

"The articles are to appear in the name of the Dental Health Council of the Indiana State Dental Association approved by the Bureau of Publicity of the Indiana State Medical Association.

"II. The Bureau of Publicity of the Indiana State Medical Association agrees:

"1. To distribute each dental release to the names contained on the mailing list of the Indiana State Medical Association in addition to names supplied by the Dental Health Council.

"2. To distribute these dental releases, as nearly as possible, once a month. Occasions may arise when it is important to publish a medical article on the date regularly set for a dental release. In such pressing cases the Bureau of Publicity upon notifying the Dental Health Council may publish the medical rather than the dental article. Similar privilege is granted to the Dental Health Council.

"3. To use the addressograph machine of the Indiana State Medical Association for such releases under conditions named below.

"III. The Dental Health Council of the Indiana State Dental Association agrees:

"1. To pay all costs for preparation, addressing and mailing once monthly (or whenever sent out) dental releases.

"2. To follow general rules already laid down by the Bureau of Publicity in regard to mentioning names of doctors in active practice in Indiana and in handling any material which might under any circumstances give unwarranted publicity to any individual doctor or dentist.

"3. To present copy of each article to the Bureau of Publicity for criticism and approval. This copy should be presented two weeks before publication date as it is best that these articles be on hand in time for consideration at the regular weekly meeting of the Bureau of Publicity each Tuesday.

"4. To supply and keep up-to-date metal address plates (costs approximately five cents each per 100) of names of dentists, etc., to whom releases are to go. To send formal notice to editors announcing news service by Dental Health Council.

"5. To pay for exact time it takes one girl at office to address envelopes on addressograph machine. The price for this service is estimated for the present at $1.00 for each release. (No folding or stuffing to be done by medical association personnel.)

"6. To employ services of clipping bureau and check results on its own behalf.

"7. To pay all expenses incident to the preparation and distribution of a formal notice to be sent to the editors of the newspapers of the state and other names on mailing list announcing this new service by the Dental Health Council.

"The foregoing agreement will remain in effect until further notice.

"F. R. HENSHAW,
J. B. CARR,
W. I. MCCULLOUGH,
E. L. MITCHELL,
E. E. VOYLES, Chrm.,
Dental Health Council,
Indiana State Dental
Association."

"J. H. STYGALL,
C. P. EMERSON,
WM. N. WISHARD, Chrm.,
Bureau of Publicity,
Indiana State Medical
Association.

"THOMAS A. HENDRICKS,
Executive Secretary,
Indiana State Medical
"Association."

The Bureau of Publicity believes this to be a forward step and in the future offers its good services to the Indiana State Dental Association through its president, Dr. W. I. McCullough, and its Dental Health Council.

IV COMMENDATION OF A. M. A. UPON REPORTS OF MEDICAL MEETINGS.

In accordance with a request received from Dr. C. P. Fordyce, former news editor of *The Journal of the American Medical Association,* asking that programs of important medical meetings giving names of speakers, exact titles for their papers and talks, etc., be sent to the American Medical Association, the Bureau of Publicity adopted a form for making reports of medical meetings. So diligent have been the county society secretaries in using these forms and so successful has this method of reporting meetings proved to be that the American Medical Association has asked that each state secretary adopt a similar form for reporting meetings to the American Medical Association. This form, which is simple in the extreme, follows:

REPORT ON MEDICAL MEETING

Name of Organization_____
Place _____
Date and time_____
Speaker _____
Title of Paper_____
Special features and comments:_____

This blank is to be made out immediately following meeting and mailed to Thomas A. Hendricks, Executive Secretary, 804 Hume-Mansur Building, Indianapolis, Ind.

Copies of the above form are distributed from time to time to the county society secretaries, who fill them out after each meeting and return them to headquarters office. Upon being received at headquarters office, two copies are made of these reports, one being sent to the editor of *The Journal of the American Medical Association* and the other to the editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. The original copy is kept on file at this office and is a constantly growing

reference list to which anyone may apply for information in regard to speakers and subjects for county society and district meetings. The secretaries and officers of county and district medical societies are urged to fill out these forms for each meeting and return them to headquarters office as soon as possible.

V SUPPRESSION OF MEDICAL FRAUDS.

As in the past the Bureau of Publicity has been active in cooperation with the various agencies of the state to suppress medical frauds in one form or another. The Bureau wishes to thank the Better Business Bureau of Indianapolis for its vigilant and efficient work in gaining and publishing information concerning many of these frauds. Outstanding among these frauds may be listed the following:

1. The Tricho system for the removal of superfluous hair. The Better Business Bureau issued a bulletin concerning the Tricho system which was summarized by the Bureau of Publicity and sent to newspaper editors throughout the state.

2. Obesity cures. The Bureau issued a bulletin quoting from a release by the Food, Drug and Insecticide Administration, Department of Agriculture, warning against obesity "cures". The Bureau quoted the governmental bulletin as follows: "No drug or mixture of drugs known to the medical profession at the present time can be offered for the promiscuous use of the public in reducing weight without introducing an element of danger. Promoters of so-called obesity remedies and fat reducing cures are attempting to influence fat people to spend money for worthless or dangerous preparations. Some of these preparations contain poisonous drugs. Others are soaps to use in bathing. It is usually not the use of the soap which brings about a temporary reduction in weight, but the hot baths and exercise which alone, without the use of the fat-reducing soap, would be more effective."

3. H. B. Boram, of South Bend, who advertised himself through newspaper publicity as being a member of the Wickersham Commission appointed by President Hoover to study the causes of crime in the United States. Facts in the case obtained through the good services of Louis Ludlow, Congressman from the Seventh District, and letter received from the Wickersham Commission denying any official connection of the physician with the Commission.

4. N. J. Benson, M.D., Indianapolis, formerly of Vernon, Indiana. The Bureau called attention of the Jennings County Medical Society to the fact that Dr. Benson had allowed his name and picture to be used in patent medicine advertisements appearing in Indianapolis newspapers. As a result Benson was asked to resign his membership in the Jennings County Medical Society.

5. "Dr." Rodney Madison Laboratories. Trade Commission issued order against this concern which was set up in Indianapolis to sell a magnetic belt as a treatment for almost all types of ailments. Better Business Bureau issued a bulletin concerning this form of quackery.

6. The Overbeck Rejuvenator Corporation, which attempted to establish and promote in Indianapolis a device called "The Elixir of Life Machine," whose inventor claimed to cure everything from asthma to nightmares. Through the efforts of the Better Business Bureau this outfit was not allowed to become established in Indianapolis.

7. Calbro-Magnowave Machine. The Calbro-Magnowave machine is the latest apparatus being exploited by drugless healers. This is a super-Abrams outfit which, according to advertisements, diagnoses and treats all kinds of diseases. According to report about fifty of these machines are in use in Indiana and the Lincoln School of Chiropractic in Indiana is said to be the Indiana agent for them. Such machines are said to cost about $100.00 to build and the chiropractor, if he pays the full list price, is reported to be "out" $1,000.00 for one.

As a final statement in regard to frauds the Bureau of Publicity wishes to thank the Better Business Bureau for its interest in supressing medical quackery. During the year the Better Business Bureau issued a bulletin embodying the following points in regard to medical quackery:

(1) Medical quackery has been opposed by the Better Business Bureau throughout the year by bulletins, radio talks, and newspaper warnings.

(2) Bulletins were issued by the Bureau against the Tricho System and the Dunsworth Laboratories, both recognized as inherently dangerous methods of removing superfluous hair; the Theronoid Corporation, selling an electric belt as high as $75.00 as a magnetic "cure all"; the Vit-O-Net Corporation, selling a magnetic blanket which was held out as having a mysterious electric healing power.

VI FIGHT OF BUREAU AGAINST RE-ENACTMENT OF SHEPPARD-TOWNER ACT.

The Bureau of Publicity, cooperating with the State Legislative Committee, used its best influence to guard against the enactment of Sheppard-Townerism through the attempted passage of the Jones-Cooper bill during the last session of Congress. The Bureau takes this opportunity of thanking the Indianapolis *News* and the Indianapolis *Star* and many other newspapers of the state for the stand they took in their editorial columns against such paternalistic legislation as the Jones-Cooper bill.

VII HISTORICAL WORK OF BUREAU.

In 1929 the House of Delegates passed a resolution authorizing the Bureau of Publicity to establish Archives of Medical History in Indiana and to recommend to the House of Delegates the name of a member of the Indiana State Medical Association as historian and that the appointment of such historian shall be permanent when so elected by the House of Delegates until removed by death or has become incapacitated from other causes. The Bureau has not seen fit up to the present time to recommend the name of any one man as historian. It is a matter of such importance that the Bureau requests additional time before making further recommendation. The Bureau, however, has from time to time interested itself in the collection of historical medical data.

1. The Bureau gave $50.00 to the Indiana State Library to have a photostatic copy of Dr. Asahel Clapp's diary made so that it could be in permanent possession of the Indiana State Library and the Indiana State Medical Association. Dr. Clapp, of New Albany, Indiana, was the first president of the State Medical Association, which was organized in 1820 at Corydon, and he was president again in 1851 following the organization of the present association at Indianapolis in 1849.

2. The Bureau has made inquiry into the first constructive steps to obtain state hospitals in Indiana and has these data on file, along with many answers to questionnaires sent to hospitals in regard to the date of founding, number of beds, etc.; 154 of these questionnaires were sent out and 106 replies received.

3. Dr. Harvey Wiley. Following the death of Dr. Wiley the Bureau of Publicity prepared a short tribute and historical sketch to Dr. Wiley, the father of the Pure Food and Drug Acts. This sketch not only was carried in the press throughout the state but was copied in many metropolitan papers throughout the country.

4. Report of "reminiscent" meeting of the Madison County Medical Society and search for information in regard to the founding of the old LaPorte Medical School. The Bureau urges that a special historical committee be appointed by each county society to obtain and guard the records of all early local medical history.

VIII BUREAU ACTING IN ADVISORY CAPACITY.

From day to day as time goes on the Bureau receives more and more requests from the laity and from the profession throughout the state for advice concerning any number of subjects. The Bureau, of course, has no power to act in such matters outside of a purely advisory capacity. However, acting in such a capacity the Bureau has always felt that it is its duty to speak with plainness

and emphasis. Acting in this advisory capacity the Bureau reports its sentiments upon the following questions:

1. The stand of the Bureau upon the question of rebates. During the year it was brought to the attention of the Bureau of Publicity that certain instrument houses and optical companies are sending refund checks or credit memoranda to physicians who have referred patients to the commercial firms for the purchase of trusses, braces, glasses, and materials. It is the judgment of the Bureau that credit memoranda, checks, cash, or rebates in any form are wholly unethical and demoralizing. The Bureau does not approve of this practice in any form whether by cash, credit memoranda, or merchandise. In disapproving rebates as unethical the Bureau is acting in harmony with the Code of Ethics of the American Medical Association.

The Bureau has had some correspondence with commercial concerns inquiring as to their attitude in this question and several of these houses stated that they never have made rebates, while others stated they had given checks or credit memoranda to physicians referring patients to them and justified this practice on the grounds that their competitors were doing the same thing. The inevitable publicity of this pernicious practice will reflect unfavorably upon all those indulging in it. The Bureau is glad to report that a number of commercial houses in Indianapolis has in writing not to indulge in this practice.

The Bureau is glad to commend the fine attitude of the Indiana Academy of Ophthalmology and Otolaryngology as indicated by the following communication received from its secretary:

"The officers and council of the Indiana Academy of Ophthalmology and Otolaryngology wish to take this opportunity to acquaint you with a movement which at present is on foot and being much discussed. There is a nation-wide movement trying to put a stop to optical and surgical supply houses sending rebates back to doctors who have sent patients to them. This movement has no objection to physicians selling material which they may keep on hands, but has to do more with the case of a doctor sending a patient to a surgical supply house to be fitted with a truss, or to an optical supply house to be fitted with glasses and the supply firm sending a bonus check back to the doctor.

"This movement is brought to the attention of the Academy quite forcefully and it seems that some definite opinion must be expressed. Therefore, it was thought wise to notify each member of the Academy of the movement, so that it may be discussed at the next regular meeting in December."

The minutes of the Bureau of Publicity of June 2, 1931, giving the opinion of the Bureau in regard to this matter follow:

"The secretary of the Academy asked that the Bureau comment upon this letter and make suggestions before it is sent to the members of the Academy. The Bureau was of the opinion that it is up to the Academy to decide what letter is sent out to its members. The Bureau does not wish to suggest what type of letter should be sent further than unequivocally stating that the Bureau is against fee splitting in any form and regards rebating on surgical and optical supplies as plainly opposed to the ethics and highest standards of the medical profession."

2. An Indianapolis physician who had been asked to address a state gathering of cultists which was to meet in Indianapolis asked the Bureau to decide whether or not he should accept such an invitation. The physician said his talk would be along educative and not scientific, technical lines. The Bureau stated that it had no official power to act in such a matter outside of a purely advisory capacity. In such capacity the Bureau would not advise that the physician make such a talk.

3. The following letter was received from a physician:

"I recently treated the widow of a physician. Her illness resulted in her death. Her husband had been dead for some twenty-five years and she is survived by two sons and a daughter. She owned some fairly valuable real estate. Should I make a charge for services against the family?"

Answer of the Bureau:

"The matter of charging for services rendered the patient in question seems to be governed by the personal relations between the physician and his clientele, local custom, and the physician's own judgment. The Bureau feels that in the abstract there would be no violation of ethics in making a charge under the circumstances mentioned."

4. A school nurse made the following request of the Bureau:

"Please advise us how far we may venture in advising school children to go directly to an oculist for the care of any eye defects.

"I am enclosing slips we use to report defects found, and of course have had some criticism from the opticians and also one or two family physicians, who feel we should send all cases to them directly."

This letter was presented by the Bureau to an eminent ophthalmologist asking if there is any class of eye cases which might be referred to an optian or an optometrist and by such action make it possible for a grave condition of the eye to be overlooked. The ophthalmologist said that an optician or an optometrist might overlook certain inflammations of the anterior or posterior segments of the eyeball which would result in a grave condition of the eye.

The letter of the Bureau in answer to this inquiry follows:

"The Bureau has instructed me to write you that many complicated conditions of the eye may not be apparent upon ordinary examination and the Bureau suggests that the class of cases indicated in your letter should be referred to an oculist through the family physician. The family physician usually knows the hereditary and individual tendencies of his clientele and should be glad to send such patients who need the attention of an oculist directly to a competent specialist in this line of work."

5. Request received from director of the Division of Infant and Child Hygiene of the State Board of Health for a formal statement from the Bureau of Publicity indicating that the Indiana State Medical Association was cooperating in the program that is conducted each year at Winona Lake by the Child Hygiene Division of the State Board of Health. The Bureau felt that it could not truthfully say that this conference was being conducted in cooperation with the Indiana State Medical Association as such was not the fact. The State Association is wholeheartedly interested in child welfare, but the Bureau of Publicity does not feel that it is authorized to make any statement which could be construed that this conference is sponsored in any way by the state society.

IX NEWSPAPER RELEASES PUBLISHED SINCE LAST REPORT OF BUREAU.

Infant Care in Warm Weather.
The Tricho System.
Annual Meeting at Fort Wayne.
General Program.
Public Meeting at Fort Wayne.
Scientific Program.
Dr. McDonald's Speech.
Where Do You Sleep?
How Can You Know?
Cold Facts.
Sanity in Driving.
Thanksgiving Greetings.
A Word to Hunters.
The Best Christmas Gift.
Uncle Sam as Nursemaid.
Immunization Against the Infectious Diseases of Childhood.
Louis Pasteur and Vivisection.
Mumps.
Basketball and Physical Examinations.
Sinus Trouble.
What It Costs to Become a Doctor.
Rabies or Hydrophobia.

Figures on Rabies.
Correspondence Schools for Nurses.
May Day.
Medical Secretaries' Conference.
Scarlet Fever.
Chiggers
Hot Tips on Keeping Cool.
Lock-Jaw Weeks.
Safe and Sane Swimming.
Food Fads Passing.
Typhoid and Paratyphoid Vaccination.
New Health News Service.

These releases were distributed as follows:

1. Eight hundred and twenty-five to Mrs. Edna Hatfield Edmondson, executive secretary of the Indiana Parent-Teacher Association and field work of the Extension Division of Indiana University. These releases are distributed to the parent-teacher associations and women's clubs of the state during the fall, winter and spring months. The Bureau wishes to thank Mrs. Edmondson, the Parent-Teacher Association, and Indiana University for their splendid help and cooperation.

2. Fifty to Miss Eva F. MacDougall, director of the Division of Public Health Nursing of the Indiana State Board of Health. It is with special pleasure that the Bureau of Publicity thanks Miss MacDougall and the public health nurses' organization for their interest and help in the distribution of these releases.

3. Fifty to the State Director of the Department of Health of the Woman's Christian Temperance Union of Indiana.

4. Each councilor and secretary of each county medical society gets a copy of each article.

5. Editors of 275 newspapers and magazines of the state receive copies. Besides these, the articles often are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association, and several other health publications of the state, including twelve religious, fraternal and farm journals.

X Radio Talks.

Radio talks as follows have been given each week throughout the year on Saturday night over Station WFBM of the Indianapolis Power and Light Company:

Preparation of Children for School.
The Common Drinking Cup.
Can You Answer These?
Competitive Athletics.
Where Do You Sleep?
How Can You Know?
Cold Facts.
Sanity in Driving.
The Family Medicine Chest.
A Word to Hunters.
Thanksgiving Greetings.
Periodic Health Examination—The Best New Year's Gift.
Appendicitis.
Immunization Against the Infectious Diseases of Childhood.
Basketball and Physical Examinations.
Mumps.
Sinus Trouble.
Shock Troops Against Disease.
Children and Fear.
What It Costs to Become a Doctor.
Neuralgia.
Trachoma.
Superstitions About Health.
Measles.
Spring Exercise.
Rabies or Hydrophobia.
Figures on Rabies.
The Preschool Child.
Prenatal Care.
Keep Your Eye on the Ball.
Scarlet Fever.
Safe and Sensible Swimming.
Strenuous Week Ends.
Infant Care in Warm Weather.
Lockjaw Weeks.
Medical Patriots.
Chiggers.
Food Fads Passing.

On those occasions when the Bureau has granted permission to an outside agency to use its time on the radio, approval is given upon the express provision that the exact copy of the broadcast be submitted to the Bureau for review before the broadcast is made.

XI Speaking Engagements.

Many requests have been received by the Bureau of Publicity to supply speakers for both medical and lay meetings. The Bureau of Publicity has been more or less directly or indirectly responsible for obtaining speakers and arranging programs for numerous other meetings. Since the last annual report of the Bureau the following meetings have been addressed by Bureau speakers:

1930

Sept. 12—Carroll County Medical Society, Flora.
Oct. 6—Rush County Medical Society, Rushville.
Oct. 7—Kiwanis Club, Cambridge City.
Oct. 9—Kiwanis Club, Richmond.
Oct. 10—Carroll County Medical Society, Camden.
Oct. 10—Adams County Medical Society, Decatur.
Oct. 14—Knox County Medical Society, Vincennes.
Oct. 15—Tri-County Medical Society, North Vernon.
Nov. 12—Kiwanis Club, Muncie.
Nov. 15—Kiwanis Club, Connersville.
Nov. 18—Knox County Medical Society, Vincennes.
Nov. 20—Exchange Club, Muncie.
Dec. 4—Dearborn-Ohio County Medical Society, Lawrenceburg.
Dec. 9—Knox County Medical Society, Vincennes.
Dec. 9—Hanover College Chapel, Hanover.
Dec. 9—Hanover High School, Hanover.
Dec. 9—Madison Rotary Club, Madison.
Dec. 9—Hanover Parent-Teacher Association, Hanover.

1931

Jan. 12—Bell Telephone Men's Club, Indianapolis.
Jan. 23—Hendricks County Medical Society, Danville.
Jan. 29—Parent-Teacher Association, School No. 43, Indianapolis.
Feb. 10—Hamilton County Medical Society, Westfield.
Feb. 17—Bar Association of Delaware County and Delaware-Blackford Medical Society, Muncie.
Feb. 19—Tri-County Medical Society, North Vernon.
Feb. 20—Hendricks County Medical Society, Danville.
Feb. 25—Wayne County Federation of Women's Clubs, Cambridge City.
Mar. 17—Tri-County Medical Society, Columbus.
Apr. 23—Montgomery County Medical Society, Crawfordsville.
May 1—Howard County Medical Society, Kokomo.
May 12—Hamilton County Medical Society, Sheridan.
May 19—Child Health Conference (White House), Logansport.
June 4—Fountain-Warren County Medical Society, Covington.
June 4—Hancock County Medical Society, Fortville.
June 28—Indiana Democratic Editorial Association, Gary.

XII Financial Statement of the Bureau.

The expenditures of the Bureau from August 1, 1930, to August 1, 1931, follow:

Clipping service	$ 63.50
Postage	191.70
Stationery and mimeograph supplies	165.42
Printing	8.80
Traveling expenses of speakers	86.86
Miscellaneous	78.90
Total expense	$595.18

The Bureau was allowed by the Budget Committee $575.00 for the year of 1931. Of this amount the committee has spent $380.18 from January 1 to August 1, 1931, leaving a balance of $194.82 unexpended in the budget for the remainder of 1931.

XIII CONCLUSION.

The Bureau of Publicity could not conclude its report for the year without reprinting once again its tribute to Dr. David Ross, who for years served as a member of the Bureau:

"The Bureau of Publicity of the Indiana State Medical Association records with very sincere regret the death of Dr. David Ross. As a former member of the Bureau and a physician of outstanding character, Dr. Ross for many years occupied a position of unusual usefulness and influence. As a member of the Bureau he combined clearness and understanding with firmness and carefulness with such gentleness of spirit that his decisions were respected by all. He was a surgeon of high attainments and a teacher beloved by all his students. As president of the Indiana State Medical Association and the Indianapolis Medical Society and a member of the Bureau of Publicity and later as chairman of the Executive Committee of the state medical association, he filled with ability and great success the various important positions to which he was called. Also for many years he had ably represented the Indiana State Medical Association as a member of the House of Delegates of the American Medical Association. In his professional and private life he exemplified the golden rule to an unusual degree.

"The Bureau of Publicity extends its very sincere sympathy to his family."

Respectfully submitted,

WILLIAM N. WISHARD, Chairman,
C. P. EMERSON,
J. H. STYGALL.

REPORT OF COMMITTEE ON POST-GRADUATE STUDY

House of Delegates, Indiana State Medical Association:

Gentlemen:—In 1926 the chairman of the Postgraduate Committee of this Association addressed a questionnaire to the secretaries of the various state medical societies to discover what was being done in the field of postgraduate medical instruction. From the replies received it was evident that in no state at that time was there a well-defined plan for postgraduate instruction. About half the replies stated that no instruction at all was given in the state. Wisconsin and New York had the best formulated plans for general instruction, while Pennsylvania had the best worked-out and most extensive plans for postgraduate study.

The provisions for postgraduate study in the various states are of three kinds: First, providing speakers for meetings of the county societies; second, clinics arranged at hospitals or university centers, given by local or imported talent; third, systematic courses given at medical schools.

A review of the situation in Indiana shows that it is probably doing as well in this matter as any other state. The bulk of the postgraduate work is given at the meetings of the county medical societies. It is common practice to have these addressed by distinguished physicians from all parts of the country. In many instances, in the larger cities, clinics are given at the various hospitals. In special lines as tuberculosis, roentgenology and otolaryngology, excellent clinics are given. Unfortunately, the facilities of the medical school have not been adequately utilized for postgraduate instruction.

The character and amount of postgraduate instruction as it is conducted at present in this state depends to a great extent upon the initiative of the secretaries of the various county medical societies. These men deserve great credit for the really excellent work which has been done. This work has done much to improve the general level of medical practice in Indiana in recent years. The machinery for conducting it is already in place and it seems to the committee that the most practical plan for improving postgraduate work in this state is to assist the county secretaries in the preparation of their programs. To this end the State Association can render great assistance, *e. g.*, first, by extending aid to the various county secretaries in providing speakers; second, through the executive secretary by arranging clinical conferences in the hospitals of the various larger centers which could be attended by the physicians of the surrounding counties; third, by sending out groups of speakers to cover special topics and providing them with the necessary lantern slides, motion pictures or other equipment.

The committee wishes to make some suggestions in regard to programs. In general, each program should consist of talks on various aspects of one subject. Too often medical programs contain several papers on totally unrelated matters. This destroys unity of interest and effect. The second suggestion is that there is objection to the entire reliance of any medical society upon outside speakers for its medical programs. It is of great benefit to any physician to study a topic and prepare an address on it to deliver to his colleagues. After all, education must depend upon what the individual does for himself. The third suggestion is that at least in the larger centers better medical libraries be provided. This can usually be accomplished by enlisting the aid of the city librarian. The doctors should be encouraged to do systematic reading and study. This is the best possible form of postgraduate instruction. Finally, it would not be amiss for the president and executive secretary to confer with the authorities of the state medical school to work out some plan for the utilization of the really extensive clinical material of the University and City Hospitals at Indianapolis for postgraduate study. The committee feels sure that the University will be willing to cooperate in any possible way to accomplish this end.

A final word in regard to the training of men for the various specialties. At present it is extremely difficult for a man who seeks such training to find it anywhere in the United States. This is one reason why so many men enter the various special lines of practice with inadequate training. The responsibility rests upon the profession to supply this need. Our larger hospitals, through affiliations with our own or with other medical schools and by providing resident services extending over several years, can do much to help in this matter.

W. D. GATCH, Chairman,
CHARLES N. COMBS,
J. DON MILLER,
MILES F. PORTER, JR.,
GEORGE A. COLLETT.

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

Name and Residence	*Elected*	*Served*
Livingston Dunlap, Indianapolis	1849	1849
William T. S. Cornett, Versailles	1849	1850
Asahel Clapp, New Albany	1850	1851
George W. Mears, Indianapolis	1851	1852
Jeremiah H. Brower, Lawrenceburg	1852	1853
Elizur H. Deming, Lafayette	1853	1854
Madison J. Bray, Evansville	1854	1855
William Lomax, Marion	1855	1856
Daniel Meeker, LaPorte	1856	1857
Talbott Bullard, Indianapolis	1857	1858
Nathan Johnson, Cambridge City	1858	1859
David Hutchinson, Mooresville	1859	1860
Benjamin S. Woodworth, Fort Wayne	1860	1861
Theophilus Parvin, Indianapolis	1861	1862
James F. Hibberd, Richmond	1862	1863
John Sloan, New Albany	1863	1864

Name and Residence	*Elected*	*Served*
John Moffet (acting), Rushville	1864	1864
Samuel M. Linton, Columbus	1864	1864
Myron H. Harding, Lawrenceburg	1865	1865
Wilson Lockhart (acting), Danville	1865	1866
Vierling Kersey, Richmond	1866	1867
John S. Bobbs, Indianapolis	1867	1868
Nathaniel Field, Jeffersonville	1868	1869
George Sutton, Aurora	1869	1870
Robert N. Todd, Indianapolis	1870	1871
Henry P. Ayres, Fort Wayne	1871	1872
Joel Pennington, Milton	1872	1873
Isaac Casselberry, Evansville	1873	1874
Wilson Hobbs, Knightstown	1873	1874
Richard E. Haughton, Richmond	1874	1875
John H. Helm, Peru	1875	1876
Samuel S. Boyd, Dublin	1876	1877
Luther D. Waterman, Indianapolis	1877	1878
Louis Humphreys, South Bend	1878	.....
Benj. Newland (acting), Bedford (v.-p.)	1878	1879
Jacob R. Weist, Richmond	1879	1880
Thomas B. Harvey, Indianapolis	1880	1881
Marshall Sexton, Rushville	1881	1882
William H. Bell, Logansport	1882	1883
Samuel E. Munford, Princeton	1883	1884
James H. Woodburn, Indianapolis	1884	1885
James S. Gregg, Fort Wayne	1885	1886
General W. H. Kemper, Muncie	1886	1887
Samuel H. Charlton, Seymour	1887	1888
William H. Wishard, Indianapolis	1888	1889
James D. Gatch, Lawrenceburg	1889	1890
Gonsolvo C. Smythe, Greencastle	1890	1891
Edwin Walker, Evansville	1891	1892
George F. Beasley, Lafayette	1892	1893
Charles A. Daugherty, South Bend	1893	1894
Elijah S. Elder, Indianapolis	1894	1895
Charles S. Bond (acting), Richmond	1894	1895
Miles F. Porter, Fort Wayne	1895	1896
James H. Ford, Wabash	1896	1897
William N. Wishard, Indianapolis	1897	1898
John C. Sexton, Rushville	1898	1899
Walker Schell, Terre Haute	1899	1900
George W. McCaskey, Fort Wayne	1900	1901
Alembert W. Brayton, Indianapolis	1901	1902
John B. Berteling, South Bend	1902	1903
Jonas Stewart, Anderson	1903	1904
George T. MacCoy, Columbus	1904	1905
George H. Grant, Richmond	1905	1906
George J. Cook, Indianapolis	1906	1907
David C. Peyton, Jeffersonville	1907	1908
George D. Kahlo, French Lick	1908	1909
Thomas C. Kennedy, Shelbyville	1909	1910
Frederic C. Heath, Indianapolis	1910	1911
William F. Howat, Hammond	1911	1912
A. C. Kimberlin, Indianapolis	1912	1913
John P. Salb, Jasper	1913	1914
Frank B. Wynn, Indianapolis	1914	1915
George F. Keiper, Lafayette	1915	1916
John H. Oliver, Indianapolis	1916	1917
Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
Charles H. McCully, Logansport	1919	1920
David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
Charles H. Good, Huntington	1922	1923
Samuel E. Earp, Indianapolis	1923	1924
E. M. Shanklin, Hammond	1924	1925
C. N. Combs, Terre Haute	1925	1926
Frank W. Cregor, Indianapolis	1926	1927
George R. Daniels, Marion	1927	1928
Charles E. Gillespie, Seymour	1928	1929
Angus C. McDonald, Warsaw	1929	1930
Alois B. Graham, Indianapolis	1930	1931

COMMERCIAL EXHIBIT, 1931 SESSION

Special attention has been given this year to the exhibit of commercial firms which has grown in the last five years to be one of the outstanding features of each annual session of the Indiana State Medical Association. The display, which promises to be even more attractive and varied this year than ever before, will be set up on the mezzanine floor of the Claypool Hotel.

Such a splendid response by the commercial firms in this year of financial stress should be answered by an equal interest in the products on the part of the physicians who attend the convention. Special hours are set aside on the program so physicians may visit the exhibits, which are conveniently located at the entrance and exit of the Riley Room, where all meetings are to be held, without missing anything.

May we suggest that physicians who expect to attend the meeting prepare a list of products they may need, bring it to Indianapolis and wherever possible make their purchases from the firms having exhibit space?

The list of commercial exhibitors follows:

Commercial Exhibitors, 1931 Session Indiana State Medical Association

Abbott Laboratories	North Chicago, Ill.
Akron Surgical House, Inc.	Indianapolis, Ind.
American Medical Rating Bureau	Fort Wayne, Ind.
Columbus Pharmacal Company	Columbus, Ohio
Curdolac Food Company	Waukesha, Wis.
R. B. Davis Company	Hoboken, N. J.
Dick X-ray Company	Indianapolis, Ind.
General Foods Corporation	New York, N. Y.
Gerber Products Division, Fremont Canning Co.	Fremont, Mich.
Hoosier Pharmacal Company	Indianapolis, Ind.
Horlick's Malted Milk Co.	Racine, Wis.
The Kellogg Company	Battle Creek, Mich.
The Laboratory Products Co. (S. M. A. Corp.)	Cleveland, Ohio
Mead, Johnson & Company	Evansville, Ind.
Medical Protective Co. of Fort Wayne	Chicago, Ill.
Mellin's Food Company	Boston, Mass.
Merck & Company, Inc.	Rahway, N. J.
Petrolagar Laboratories	Chicago, Ill.
Pitman-Moore Company	Indianapolis, Ind.
W. B. Saunders Company	Philadelphia, Pa.
E. R. Squibb & Sons	New York, N. Y.
Tailby-Nason Company	Boston, Mass.
White-Haines Optical Co.	Columbus, Ohio
Max Wocher & Son Company	Cincinnati, Ohio

Detail accounts concerning the products each company has on display follow:

Real Coffee Without Caffein

Sanka Coffee, manufactured by the General Foods Corporation, New York, has been accepted by the Committee on Foods of the American Medical Association with the statement: "Is free from caffein effect and can be used when other coffee has been forbidden."

Sanka Coffee is genuine delicious coffee which is decaffeinated before the beans are roasted. This leaves intact all the mellow flavor and fragrance. Coffee experts recognize that no other blend is finer. Sanka Coffee can be taken without causing sleeplessness, indigestion or nervousness. And it is so rich and satisfying in flavor that the patient never craves caffein-containing coffee.

Visit Miss Mary Edna Courtney, representative of General Foods Corporation, at Booth 27 at the Technical Exhibit, and taste for yourself the deliciousness of Sanka Coffee.

High-grade Pharmaceuticals

The Columbus Pharmacal Company are manufacturers of fine, high-grade pharmaceuticals distributed exclusively through the medical profession. Their leading specialties are (in liquids): Antiseptic and Nutritive Oil, Alfal-Vita Comp., Glycerole Gentian Comp., Loingia, Maltalfa Comp., Oxachol; (in tablets) Chola Bileine, Goitron,

Gastro Gestin, Livovoids, Pilvenoids, Laxine; (in powders) Bis-Co, Golden Powder, Kaocol (Colloidal Kaolin Comp.), Ephedrine Products in oil and aqueous bases, Ephenaze Cream, Ephenaze Spray; also a full line of ointments and suppositories.

They will appreciate a visit from members of the association and guests at Booth 38.

Step Right up for Cocomalt!

Cocomalt will be served to visiting physicians and their friends at Booth 43 by the R. B. Davis Company, of Hoboken, New Jersey.

When milk is an important part of the diet and when patients demur at its monotony may we suggest mixing milk with Cocomalt? Cocomalt makes milk a delicious, creamy, chocolate flavor food drink that children and patients drink eagerly.

Cocomalt is easily digestible and adds over 70 percent to the caloric value of the milk with which it is served. It also adds 45 percent more protein, 48 percent more mineral salts (lime and phosphorus) and 184 percent more carbohydrates.

Our representative, Mr. George Dowding, will be very happy to answer any questions concerning Cocomalt.

Diabetic Specialties

Curdolac Foods for diabetics were developed to meet the necessity for products of moderate food content. These foods fill the need of three satisfying meals daily. Each product has been produced in answer to the plea of a diabetic, "Living on my diet would be easier if I only had .....". Each food has been time-tested at Waukesha Spa where treatment of diabetes has been a specialty for more than twenty years.

W. E. Nicely, M.D., medical director of the Spa, will be present at the convention. The exhibit will also be accompanied by Miss Eva Spicer, dietician. All inquiries concerning this extensive and palatable line of foods for diabetics will gladly be answered at Booth 14.

Aids in Auto Injuries

"The Century Old surgical house," The Max Wocher & Son Co., of Cincinnati, Ohio, will be with us again this year. They usually have a very interesting exhibit for the profession. Their exhibit this year will be in charge of Mr. T. W. Marshall, whom everybody in Indiana knows as an old surgical instrument salesman who has lived in Indianapolis for a good many years. Among other items Mr. Marshall will show a new colonic irrigator designed by Wocher. This outfit costs less than any similar outfit heretofore shown. Boehler splints will also be shown. These are popular in Vienna and are now the rage on account of the many automobile accidents.

Vegetables for the Kiddies

Strained vegetables for infant feeding and special diets will be exhibited by Gerber Products Division of the Fremont Canning Company, Fremont, Michigan. These products have gained wide acceptance by the medical profession and the trade during the two years since being introduced.

Strained, unseasoned, specially prepared, these products are of unusual interest because they offer the physician an opportunity for more perfect control of infant diets and insure uniform, properly prepared feedings.

Visitors at the booth will be given any information wanted concerning the manufacture of the product and will be given an opportunity to register for samples and full detailed information of special interest to the profession by Mr. Elmer W. Koenig, Indiana representative.

Samples from Horlick's

Horlick's Malted Milk Corporation, Racine, Wisconsin —Horlick's, the original malted milk, a product in which all of the ingredients are scientifically processed, is being exhibited, both the natural and chocolate flavors, together with the newer member of the family, Horlick's maltose and dextrin milk modifier. Also Horlick's malted milk tablets, a convenient form of quick luncheon, and useful as a pleasing variant in the liquid diet.

Horlick's will be found at Booth 33 with G. A. Glasgow in attendance, where visiting physicians will be given an opportunity to have samples forwarded direct to their offices.

"Coffee That Let's You Sleep"

The Kellogg Company, Battle Creek, Michigan, is serving Kaffee Hag Coffee, "the coffee that lets you sleep," with All-Bran Muffins to visitors at Booth 30. Kaffee Hag Coffee is a blend of fine coffees from which the caffeine and indigestible wax have been removed. The fine flavor and aroma are not impaired and doctors will find Kaffee Hag Coffee a satisfactory non-stimulating beverage to suggest for special diets. Miss Helen L. Pickard, from the Home Economics Department, is in charge of the exhibit.

Movies by S. M. A.

S. M. A. Corporation in Booth 3 is featuring a motion picture film of typical spasmophilic patients. These are interesting studies in themselves, but the point emphasized is that babies fed on S. M. A. do not develop spasmophilia.

S. M. A. is recognized by most physicians to be the nearest existing approximation of mother's milk, yet few physicians realize that in spite of its many advantages, S. M. A. costs less than one cent an ounce ready to feed.

Besides S. M. A., they are also showing new non-allergic milks which are useful in diets for either adults or infants sensitive to milk protein. Clinical results with this new milk fully justify the hope that it fills a long-felt want in allergy cases.

Mead's Diet Lists

Mead, Johnson & Company, Evansville, Indiana, will have on exhibit its complete line of infant diet materials, including Mead's dextri-maltose, Mead's cod liver oil, Mead's viosterol, Mead's recolac, Mead's non-curdling powdered protein milk and Mead's non-curdling powdered lactic acid milk, Mead's powdered yeast and Mead's cereal.

There will also be for the examination of physicians a complete line of Mead's services such as diets for older children, height and weight charts, etc., all of which are free to members of the medical profession in any quantity desired.

Mr. P. G. Bicknell will be on hand to meet his friends and to discuss the application of any of the Mead products to infant feeding problems.

Doctors, We Say Hello!

We want to say "Hello!" to our many friends in the Indiana State Medical Association. We will be at exhibit spaces 34 and 35, where our display will be in charge of our Sales Manager, M. J. Brown, and our Indiana representatives, O. B. Griffin, V. W. Royster and R. T. Sanders. Our pharmaceutical products and specialties will be on display, including Siomine, Muriatogen, Cupritone, Tablets Oxiphen, and others.

You are cordially invited to visit our Home Offices and Laboratories at Madison Avenue, Morris and Delaware Streets while attending the convention.

PITMAN-MOORE COMPANY.

Mellin's Food Facts

An exchange of ideas and opinions relative to the feeding of infants and in regard to the preparation of nourishment for adults requiring a restricted diet are of much value, particularly in view of the recognized importance of selecting food material best adapted to the individual requirements. The Indianapolis meeting will afford an opportunity for such discussion and not only during the general sessions but in the exhibit hall where representatives of the Mellin's Food Company will await physicians' questions and be ready to discuss the subject

matter from the maker's viewpoint. Members of the Association are cordially invited to call at Booth 1.

Widely Known Products by Merck

Merck & Co., Inc., include in their display such well-known preparations as the arsphenamines, bismosol, the aqueous solution of bismuth, pyridium, urinary antiseptic, tryparsamide, stovarsol, optochin base, digitan, erythrol, etc. The Bilhuber-Knoll products are also shown—metrazol, theocalcin, afenil, euresol, santyl, etc.

Mr. F. Kraus and Mr. A. W. Veazey are in charge of the Merck's products and Mr. T. A. Nooner for the Bilhuber-Knoll Corporation. Booths 28 and 29.

Scientific Movies by Petrolagar

Scientific medical motion pictures will be presented by Petrolagar Laboratories in a beautiful modern display.

Visitors may relax and devote uninterrupted attention to this splendid library of films of international reputation. The list comprises twelve exceptionally instructive subjects.

Presentations before accredited medical groups may be arranged for any place or date without charge.

Our representative, Mr. E. J. Smith, will be in charge of our exhibit at this meeting.

Books by Saunders

W. B. Saunders Company, Publishers, Philadelphia and London, well-known publishers, will attractively exhibit their complete list of titles. Among those of particular interest, because of their newness, will be the Mayo Clinic Volume; two new volumes in the Mayo Monograph Series, one on "Hemorrhoids" by Dr. Louis A. Buie, and the other on "Addison's Disease" by Leonard G. Rowntree and Albert M. Snell; a new edition of J. Chalmers Da Costa's "Surgery" and his new book on "Papers and Speeches"; a new edition of Cecil's "Medicine"; Evarts a Graham's "Surgical Diagnosis"; Moorhead's "Traumatotherapy"; Wayne Babcock's "Surgery"; Beckman's successful "Treatment in Practice"; Kaplan's "Radiation Therapy"; Blumer's "Bedside Diagnosis"; new edition of Todd and Sanford's "Clinical Diagnosis by Laboratory Methods"; Curtis' "Gynecology"; Andrews' work on "Diseases of the Skin"; new edition of McLester's work on "Nutrition"; new edition of Howell's "Physiology"; Webster's new work on "Legal Medicine and Toxicology"; new edition of Jordan's "General Bacteriology". Besides advance sheets of a number of new books in active preparation for publication this fall. Mr. Arthur Adams will be in charge.

Squibb to Have Fine Display

A cordial invitation is extended to physicians attending the Indiana State Medical Association meeting to visit the Squibb exhibit, Booth 13. A number of newer products will be displayed, including a highly potent vitamin concentrate of Squibb cod-liver oil, a physiologically tested ovarian hormone preparation, a chemo-therapeutic agent for the treatment of genito-urinary infections, a citric acid tablet for the preparation of acid milk, used in the artificial feeding of infants, and a group of copper-iron preparations for use in the treatment of certain types of nutritional anemia. The complete line of Squibb Vitamin, Glandular, Arsenical, and Biological Products will be displayed and an opportunity afforded physicians to become better acquainted with the many varied products available. Descriptive literature and samples of some of the newer products will be available and competent representatives will be in attendance to furnish any information desired concerning the products displayed. Mr. R. E. Harmon and Mr. P. H. Ramsey will be in charge.

International Delegate to Attend

This distinguished visitor and ally of the medical profession hails from the Lofoten Islands of Norway. The delegate is next to the largest cod fish ever caught, which was taken from the Lofoten waters by Nason & Co., producers of Nason's Palatable Cod Liver Oil. His weight was over sixty-five pounds. His liver made nearly three pints of Nason's light golden, sweet and palatable oil. This giant cod is receiving at Booth 16 and is an important part of Tailby-Nason's exhibit of Nason's palatable cod liver oil. Please call and see this distinguished visitor.

Will Show Bausch & Lomb Equipment

The White-Haines Optical Company will feature Bausch & Lomb optical equipment as well as the Panoptik bifocal. Mr. Donald Rowles, manager of our White-Haines Indianapolis branch, will be in charge of the exhibit.

Cheerio from O'Meara

All members of the Indiana State Medical Society and friends are cordially invited to visit Booth 5 of the Medical Protective Company. Mr. J. D. O'Meara, General Agent for Indiana, will be delighted to have you call, whether merely to say "Hello!" and renew old acquaintance or to satisfy yourself on some question of malpractice protection. Consider him at your service and feel free to call upon him for anything which may contribute to making this the most pleasant and successful society meeting you have ever attended.

Booth 42

American Medical Rating Bureau offers an ethical service for physicians and surgeons—a constructive service to educate the public to its true responsibility regarding the payment of their doctor bills, without offending or creating any ill will. Three fundamentals:

First: To give a credit rating on all patients and protect against people who do not pay their bills.

Second: To assist the physicians and surgeons in collecting their legitimate fees in an ethical manner and in the spirit of the "Golden Rule" by educating the public that the doctor expects to receive his money as promptly as any other creditor.

Third: To make the Bureau self-supporting so that the service can be paid out of the profits that the doctor will make as the result of his cooperation with the organization.

Full details will be given at Booth 42 by Mr. E. L. Koenemann, secretary.

Invited to Visit Booth 7

The Hoosier Pharmacal Company of Indianapolis will again exhibit a line of high-grade pharmaceuticals, greet their many friends, and make new acquaintances.

The Hoosier Pharmacal Company was organized in 1916 and has been serving the practicing physician exclusively since its organization.

Their booth is number 7 where they will be glad to have members of the Association and guests pay them a visit.

William H. Armstrong Co., Indianapolis

American Metal Furniture Company products. W. D. Allison Company wood office furniture. Scientific display of microscopes, gas oxygen outfit, metablolor, sterilizers and instruments. Exhibit in charge of Kenneth E. Hoy and S. H. Greenburg.

SOME REFERRED AND REFLEX EYE DISTURBANCES

(Continued from page 476)

investigate and see if you cannot find a cause for their symptoms, which may be pain in the eyes, frontal headache, or what not. Doctor Allen has mentioned at least three of these causes, and there are others. We frequently find them in patients who have some gastrointestinal disturbance, such as constipation; or we find them in patients who do not get enough sleep, and where the headache is of but a few days' duration I would be a little slow about putting glasses on them. I do not know anything that hurts one's pride worse than to put

glasses on a patient and have him wear them for a week or two and then throw them away.

In regard to the conditioned reflexes, this is something new, and I did not have the doctor's paper to read up on it. It sounds like a very plausible theory and no doubt explains why a good many of these presbyopes who have never worn glasses cannot wear a cylinder correction, and possibly it is just as well to fit them for reading and let them go. They frequently are much more comfortable than if you give them a careful refraction and put in cylinders with the exact axis.

I want to compliment Doctor Allen on his paper. It brings out some very good things, each one of which should be looked for in those cases with apparent eyestrain which are not due to the eyes themselves.

O. T. ALLEN, M.D. (closing): The paper really deals with refraction; as oculists we must fit the patient as well as the eyes. We must get the history, and if a patient thirty years of age comes in with astigmatism, never had any trouble until two weeks before, we must look somewhere else for the cause of the disturbance. If we did that in all cases our patients would wear glasses better. We should go into these extraneous things with a view of getting a careful history, and then we will know whether to correct the astigmatism or to leave it alone, and many times we will leave it alone.

SPECIAL ARTICLE

DIPHTHERIA DEATHS FOR 1931 JUNE AND JULY

Since our last little article on this subject, two months have turned in returns on diphtheria deaths, June with seven deaths and July with two. This brings the total to date to 59, which is slightly under the figure for last year (63) at the end of seven months. We note that Southwestern Indiana is showing a number of deaths in the past two months, and we have heard rumors that there already have been several deaths in that quarter for the month of August. We frequently have mentioned the splendid record made in the past twelve months by that portion of the state and are very sorry to see them slipping.

We are at this time preparing an exhibit for the State Medical Association session in Indianapolis on this matter of diphtheria in Indiana, and are considerably pleased to see evidences that we are getting somewhere. In the first place the number of deaths gradually is falling and there is evidence that reporting of cases is being done much better. This is important.

DIPHTHERIA DEATHS FOR 1931

COUNTY	TOTAL FOR 1931	JUNE, 1931	JULY, 1931
Allen	2	0	0
Bartholomew	1	0	0
Brown	1	0	0
Carroll	1	0	0
Clark	2	0	0
Dearborn	2	0	0
Delaware	3	1	0
Fayette	2	0	0
Franklin	2	0	0
Gibson	1	0	0
Grant	2	0	0
Green	1	0	0
Hamilton	1	0	0
Hendricks	1	1	0
Henry	2	1	0
Howard	2	0	0
Huntington	2	1	0
LaGrange	1	0	0
Lake	5	0	0
Laporte	1	0	0
Lawrence	2	0	0
Madison	5	0	0
Marion	1	0	0
Marshall	1	0	0
Martin	2	0	1
Montgomery	1	0	0
Newton	1	0	0
Orange	1	0	0
Perry	2	2	0
Ripley	3	0	0
Starke	1	0	0
Sullivan	1	1	0
Vanderburgh	1	0	0
Vigo	1	0	0
Whitley	1	0	1
	59	7	2

ABSTRACTS

TREATMENT OF CHOREA BY INDUCTION OF FEVER

LUCY PORTER SUTTON, New York (*Journal A. M. A.*, Aug. 1, 1931), has treated twenty-four choreatic patients with intravenous injections of typhoid-paratyphoid vaccine as a means of producing fever. The results thus far have been good. There has been prompt cessation of the symptoms, and the course of the disease has seemed to be greatly shortened. In the cases reported the average duration after treatment was started was from eight to nine days. This treatment has been much more satisfactory than any other used at Bellevue Hospital on the Children's Medical Service. It appears to have definite advantages over phenyl-ethylhydantoin.

"SANE" OBSTETRICS

H. J. EPSTEIN and A. J. FLEISCHER, New York (*Journal A. M. A.*, July 25, 1931), believe that the expectant mother should have the benefits of "sane" obstetrics, rather than conservative or radical obstetrics. Such "sane" obstetrics can be maintained within the sphere of the incompetent though sincere physician and of the competent though over-enthusiastic physician, by education of the former as to his limitations and of the latter as to the limitations of his *modus operandi*. The full cognizance by these two groups of the "obstetric risk" as an actual reality rather than a mere fantasy will temper their judgments, so that the incompetent will not plunge where angels fear to tread, and the over-enthusiastic will not belabor the expectant mother with heavy artillery where diplomacy will serve better for her ultimate salvation. The obstetric risk in the authors' study shows that: (1) The morbidity risk in operative obstetrics was to that in nonoperative obstetrics in the ratio of 5:1. (2) The mortality risk in operative obstetrics was to that in nonoperative obstetrics in the ratio of 30:1. (3) The total infant mortality risk in operative obstetrics was to that in nonoperative obstetrics in the ratio of 3.6:1 (including spontaneous deliveries of macerated fetuses, premature infants and monstrosities). The mother of today is as fully equiped, mentally and physically, to undergo the hardships of labor as was the mother of yesteryear. A sound realization of this fact, together with a full cognizance of obstetric risk, will diminish the search for new fads to shorten labor and thereby result in a diminished maternal and infant morbidity and mortality.

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EDITORIALS

OUR PRESIDENT

The Indiana State Medical Association is honored in having Alois B. Graham, surgeon, of Indianapolis, as its president for the 1931 Indianapolis session.

Doctor Graham was born at Madison, Indiana, September 27, 1870. His early education was received at the public schools in Madison, following which he attended Hanover College, at Hanover, Indiana, graduating in 1891. He then attended the Medical College of Indiana, from which he graduated in 1894. His medical education was enhanced by postgraduate work in the Universities of Bonn and Berlin, in 1897 and 1898. He has been connected with medical teaching for thirty years, and now is professor of surgery (proctology) in the Indiana University School of Medicine. He is a member of the staffs of the University, City, and Methodist Hospitals in Indianapolis.

Doctor Graham has contributed much to medical literature, his writings including many articles on gastro-intestinal and rectal diseases. He has contributed two chapters to Dr. A. B. Cooke's textbook on anorectal diseases, and has written one chapter on anorectal wounds for the edition of Sajous' Cyclopedia which now is being revised.

He was president of the Seventh District Medical Society, 1913; president of the Indianapolis Medical Society, 1916; president of the American Proctologic Society, 1919; chairman of the Section on Gastroenterology and Proctology of the American Medical Association, 1928; for three years represented the Section on Gastroenterology and Proctology as a delegate to the A. M. A.; and was made president-elect of the Indiana State Medical Association in 1929 to serve at the 1931 session.

Doctor Graham served eighteen months with Lilly Base Hospital No. 32 during the World War. He was enlisted as a Captain and was promoted to a Major while over seas, and during the last six months of his service over seas was chief of the surgical service.

He admits a hobby—any and all kinds of sports. We suppose that his hobby has given him the physical and mental fitness characteristic of his life.

Doctor Graham married Aimee Bindley, of Terre Haute, in 1902, and they have four children, three daughters and one son (Ed Graham, the well-known cartoonist of New York City).

His affiliations are many. He belongs to the Presbyterian church, the Phi Chi and Sigma Chi fraternities, the Masonic organization, the American Legion, and Hereditary Companion Loyal Legion. He is a Fellow of the American College of Surgeons and of the American Proctologic Society.

INTRAOCULAR HEMORRHAGE FOLLOWING OPERATIONS ON THE GLOBE

There is no more distressing accident for operator as well as patient than expulsive hemorrhage following opening of the eyeball. Our own experience in connection with such a disastrous complication has been associated with cataract extraction. In one of these cases the operation had been uneventful and the dressings were about to be applied when, without warning, the patient was seized with severe pain and immediately blood was seen trickling down from under the closed lid. The vitreous accompanied or immediately followed the hemorrhage, and the eye was lost. Nothing in the patient's history or discovered by careful physical examination both before and subsequent to the operation threw any light upon the cause of the complication. The other case, out of the two that have occurred in nearly forty years' experience, was similar.

Members of the Section on Ophthalmology of the A. M. A. will remember the experience of Baker, of Cleveland, who reported before the Section, many years ago, a case in which a cataract extraction was followed immediately by expulsive hemorrhage and loss of the eye. A year or more later the same patient returned for cataract operation on the other eye. Exhaustive examinations and blood tests were made without finding anything but the previous history to contraindicate operative procedures, but the patient and operator suffered from the effects of the same kind of a catastrophe as caused the loss of the first eye.

It is entirely possible and even probable that some of these catastrophes may be avoided by giving our patients more thorough examination and study prior to operation, with elimination or control of some of the possible causes of intraocular hemorrhage, but it is believed that in some cases the catastrophes will occur no matter how carefully we try to avoid them. High blood pressure, increased intraocular tension, hemophilic tendencies, arteriosclerotic changes, and even disturbances of the sympathetic nervous system as pointed out by the late Dr. Ziegler, are etiologic factors involved in expulsive hemorrhage, and an effort should be made to discover and give appro-

priate attention to such conditions. In those cases that are looked upon with suspicion in spite of preoperative attention, and especially high blood pressure cases, venesection prior to the eye operation is a valuable preventive treatment. The barbital derivatives given several hours before and just prior to the operation are valuable in quieting the sympathetic nervous system disturbances which may be a factor in aiding or causing the disaster.

Fortunately expulsive hemorrhage in connection with operations upon the globe is not very common, but it occurs too often for our peace of mind in spite of all efforts to prevent it, and it is entirely probable that in a few of these cases we shall not be able to prevent it or put our fingers on the etiology in trying to avoid such an experience.

PODIATRY QUALIFICATIONS

We have been called to task because we offered some criticism concerning the qualifications of a podiatrist to intelligently and trustworthily treat all diseases and deformities of the human foot, and apparently our correspondent attempted to prove recognition of competency by quoting the Indiana podiatry law, which says that the term podiatry "shall be construed to mean the diagnosis, medical, surgical and mechanical treatment of ailments of the human foot. * * * The term podiatrist as used in the Act shall be construed to mean one practicing podiatry." If any podiatrist can prove that he has been trained adequately in the diagnosis, medical, surgical and mechanical treatment of ailments of the human foot we will retract anything we have said concerning inadequacy of qualifications. As a matter of fact if podiatry is to be made a specialty and a branch of the practice of medicine, as indicated by the above quotations from the law, then podiatrists should receive a general medical education and afterwards special training in the diagnosis, medical, surgical and mechanical treatment of the human foot. He then will be placed on the same plane as surgeons, dermatologists, ophthalmologists, or any other medical men practicing a specialty. To consider any podiatrist who possesses no general medical education as qualified to treat trustworthily the ailments of the human foot is as ridiculous as to say that an optician or vendor of spectacles who has no general medical education or training is qualified to treat medically or surgically the diseases or abnormalities of the human eye. The chiropractors are clamoring for recognition and perhaps eventually will be recognized, as a result of political wire pulling and spread of specious propaganda which usually accompanies the foisting of any questionable enterprise upon the people, but that doesn't mean that chiropractors with their inconsistent and peculiar beliefs and their woeful lack of knowledge of the human body in either health or disease should be considered by intelligent people as safe to undertake the practice of medicine and surgery in any of its phases. We predict that the so-called cosmeticians or beauty parlor specialists soon will be claiming that they can treat and cure all kinds of skin lesions and without the education and training of our recognized dermatologists. What a fine outlook for the public! We have no quarrel with anyone who desires in the name of the healing art to practice podiatry, chiropractic, beauty encouragement or any other bizarre form of healing, providing such persons first undergo education and training in a regular medical school, but we do believe that all of these pseudo-medical cults and so-called specialists who have not received medical training are a menace to the public. There are enough poorly trained medical men who are attempting to do things for which they are not educated or trained without adding to the number of such pretenders by including those who have had absolutely no training in general medical principles and practice.

BE ON THE LOOKOUT FOR POLIOMYELITIS

Several months ago we called attention to the fact that we might expect an epidemic of poliomyelitis during this summer. As the months have passed with comparatively few cases we have been led to hope that we might be mistaken. In the past few days, however, we are beginning to get reports of the disease from various places, and we are much afraid that the next few weeks may show a considerable increase.

With such a possibility in mind physicians will wish to brush up a little on the diagnosis and treatment of this very serious infection. This is not the place to discuss these matters in detail, but we may well call attention to the fact that time is the most important factor. Early diagnosis, prompt treatment with convalescent human serum, or as a substitute immune horse serum, and scientific after care are the triad upon which success depends.

Again we say that we hope we are all wrong in howling calamity at this time, but it is better to be on the watchout. One never can tell when or where polio is going to hit.

A MEDICAL DEGREE FOR THE DENTIST

Concerning medical training for the practice of any branch of medicine, allow us to call attention to the advanced step taken by some of the leading dentists in America who are advocating three years in an approved medical school, with the M.D. degree, and two years in the dental school, for admission to examination for a dental license. One of the best friends of the dental

profession, Dr. Oliver T. Osborne, emeritus professor of therapeutics of Yale University, is quoted in the *Illinois Medical Journal* as having said that dentistry is, in fact, a branch of medicine, and consequently the dental surgeon should be a graduate in medicine who has specialized in dentistry. As a sidelight on medical education he says that the course for the degree of M.D. should be three years instead of four, and he gives as his reason that the four-year course offers too many long vacations and too much time spent in laboratory work, so that the progressive course of three years with vacation at the minimum would give as many hours' medical study as are now represented by the four-year course. In these three years the teaching should be concentrated. There should be no unnecessary time spent in laboratory work, and only such laboratory work should be required as is necessary to perfect the study of anatomy, histology, physiology, physiological chemistry, pharmacology, toxicology, pathology and bacteriology. The specialties should not be taught in this three-year course. After the M.D. degree has been obtained, the medical graduate may continue his studies in any specialty he may desire. If the fourth year is dispensed with, the expense of the fourth year also is saved. Dr. Osborn says that while a law requiring a dentist to be a graduate of medicine could not be retroactive, yet some effort should be devised whereby dentists who wish to take a postgraduate course to better understand the human body may do so and receive a certificate for such work. He thinks that dental mechanicians should not be licensed. Most of the work now done by dentists represents modern surgery, and minor surgical operations always should be performed by graduates in medicine, and the same thing should be true in dental surgery. The so-called prophylactic dental nurse should not be licensed, as it gives her too much latitude in treating and attempting to prevent mild infections. If a dental nurse wishes to become a full-fledged dentist, or skilled technician, let her study the usual courses for these subjects. In conclusion, Dr. Osborne says, "It is with the hope that dental colleges soon will cease their opposition to the requirement that a dental surgeon should be a graduate in medicine, as in exacting this requirement will be found a large number of European nations. The United States, that long has furnished the most skilled men in the art of dentistry, should not be backward in the final protection in this, today, very important branch of medicine."

JUGGLING FINANCES

We always have said and here repeat that doctors as a whole are poor business men when it comes to applying common sense business methods to the economic side of their profession. It is not necessary to play the Shylock and exact the pound of flesh from those in distress either physically or financially, nor is it necessary to be too strict in following a reasonable course of benevolence and charity, but the physician can in the interest of himself as well as his family, to say nothing of the interest of the self-respecting patient, pursue just as businesslike methods as the merchant in the collection of amounts due for professional services rendered. At the present time few physicians follow this course and, hence, they are dubbed poor business men, and perhaps their carelessness in these matters has a tendency to breed carelessness on the part of the physician in maintaining his own credit. When it comes to making investments, we are inclined to believe, at least from the experience of many individuals during the past year, that the physician is no bigger fool than the lawyer, the merchant or the banker. So far as the banker is concerned, he above all others should recommend safe investments, even though he is quite willing to take a speculative flyer himself. During the past year it has been demonstrated that the banker too often has been willing to take flyers with someone else's money, and in consequence he no longer is looked up to with the same confidence and respect as formerly. The big fellows have had their day, lost money for themselves and every one else, and lost prestige in consequence. The little man and the wage earner, the ones who now control the savings of the country, have lost confidence and very justly so. Confidence is not going to be restored until the common people are assured that they are going to have a square deal, and that their finances are not going to be juggled as they have been during the past two years by the bankers and big-moneyed men. Furthermore, it is quite within reason that the common man is going to insist upon some kind of legislation that will do away with altogether or at least limit some of this juggling of finances. If this is bolshevistic teaching, then make the most of it.

PROHIBITING CHIROPRACTIC

The last session of the Delaware legislature wrestled with and finally passed a bill having as its object the legalizing of chiropractic in the state. Governor Buck, of Delaware, vetoed the bill, and commenting on this action *The Journal of the A. M. A.* of April 14th said, "A summarization of the reasons for his veto are so clear and terse that it should be read by the legislators and governors of every state that is threatened or already afflicted with this cult." In his detailed message Governor Buck said, "The purpose of the Act as I understand it is to legalize the practice of chiropractic in this state. Practitioners of this cult are not recognized now. Do they profess to be doctors in the same sense of the term as is commonly understood to apply to men and women of the medical profession? Insofar as I am able to

determine there is not a recognized medical school in the country that includes in its curriculum a course in chiropractic. This fact in itself seems singularly significant. Even to the lay mind the idea that all disease of whatever character is due to spinal displacements of a mild sort and that cures of such ailments as tuberculosis, smallpox, diphtheria, scarlet fever and others, can be effected by manipulation and fingering of the spine is preposterous. Before returning this bill to you I have satisfied myself that the training and education of a chiropractor, or drugless healer, to practice his art does not fit him properly to advisedly treat the sick inasmuch as he is not qualified to diagnose ailments nor recognize communicable diseases and to take measures to control them. *He is therefore an opponent to the department of health.* Wherefore it seems to me that it would be inconsistent for the legislature to appropriate, as it will do, money for the State Board of Health, which Board is trying to eradicate communicable diseases, and at the same time legalize the practice of a cult which does not believe in the germ theory of a disease but does teach and believe that such diseases as scarlet fever, etc., are due to a distracted vertebra and the method to prevent and cure such diseases is to see that everybody has a normal spine." It is unfortunate that some other states that have legalized chiropractic have not had governors as level-headed and logical in analysis as Governor Buck, of Delaware. The teaching of chiropractic and some other pseudo-medical cults is sheer nonsense, and the arguments put forth will not stand serious investigation and analysis. The action of any legislature that legalizes chiropractic ought to appear idiotic to any thinking individual who takes the time and trouble to investigate and analyze the chiropractic claims.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn Street, Chicago, Illinois.

We want THE JOURNAL to serve *you*.

THE Time: Wednesday, Thursday and Friday, September 23rd, 24th and 25th.

The Place: Indianapolis, Indiana.

The Event: The annual session of the Indiana State Medical Association.

A WELL-KNOWN columnist says, "The real wolf howling at the door of many families is their honking automobile. Without that they might make both ends meet."

A YOUNGSTER who lives in a family where one of the parents suffers from pernicious anemia has been overheard to say in his nightly prayer, "And Oh, Lord, give us our daily liver!"

A READER of THE JOURNAL gives us a new mailing address, but forgets to sign his name and give his old address. Probably the next thing will be a letter scolding us because he has not received his JOURNAL.

THE Shoulders resolution pertaining to medical and surgical care of the veterans of the World War is worthy of serious consideration on the part of our Association, and in our judgment there is nothing in the resolution which should prevent its adoption.

THE proposed change in the constitution and by-laws of the Indiana State Medical Association to provide for a speaker and vice-speaker of the House of Delegates should be adopted. It means not only the expediting of work of the House of Delegates but carrying it on in a parliamentary way.

THERE is a rumor to the effect that the long-delayed establishment of a pay clinic in Indianapolis, run on a commercial basis, is about to become a reality. We will be interested in knowing who the Indianapolis physicians are who take up with a commercial proposition such as the one mentioned.

THE Indiana State Dental Association has made arrangements with the Bureau of Publicity of the Indiana State Medical Association to release for publication in the lay press approved articles concerning oral and dental hygiene. It is expected that the articles will do much to protect the public from dental quackery.

A HIGH church official, quoted by the *Delaware State Medical Journal*, says, "Many surgeons are accustomed to use stimulants before they are to perform an operation." We believe that to be a conscienceless lie, and we think that a member of the clergy should be above the plane of scandalmongers and character-destroyers.

A CHIROPRACTOR in Indiana advertises "radio diagnosis". That is a new feature of quackery, and no doubt many people will be humbugged by it in their belief that it is something new and probably miraculous in its result. Why do better

business bureaus and the newspapers tolerate or assist in promoting such swindling games?

Psittacosis or parrot's disease is a disease associated with recently imported parrots and other pet birds, and the fact that this outbreak rapidly subsided after stopping importations, isolating the parrots in pet shops, and stopping sales, indicates that its control is a matter of preventing contact with infected birds.—United States Public Health Reports.

Sometimes a punch in the nose goes further than soft words in settling a dispute. That was the solution of the problem of attempting to collect from a wealthy man a bill for medical and surgical services rendered during the fatal illness of the man's mother. Anyone who neglects or refuses to pay for services rendered a sick mother deserves more than a mere punch in the nose.

There are any number of lay people profiting in some direct or indirect way through giving health advice to the public through talks or lectures before various organizations, including dinner and literary clubs. They should be prevented from spreading their vicious propaganda. There is a chance for some constructive work on the part of the Woman's Auxiliary of the A. M. A.

One of the patriarchs of the Indiana medical profession who still is in active practice and a little sensitive about his age was asked by one of his young associates, "How old are you?", to which the old patriarch responded, "I am not old enough to begin giving away dimes nor to start writing a medical history of Indiana," whereupon he turned on his heel and started for the golf links!

Read this number of The Journal from *cover to cover*. That will include the advertisements, many of which will offer you something for nothing if you will indicate that you would like to have it, and many others will give you valuable information that you can use in your daily practice. Read the advertisements, and *patronize the advertisers*. You will find it a mutual benefit, and you will be sure of using only approved products.

One of our acquaintances, an executive drawing a salary of six thousand dollars per year, says that he has murder in his heart when the executive of a community chest who is enjoying a salary of $7,500 per year and gives none of it to charity, walks into the office and tries to tell everybody how much they must give to the community chest in order to maintain self-respect. We offer our sympathies and our pugilistic assistance if required.

"If there is anything that gets my goat," said a prominent physician, "it is to be engaged for a labor case, watch the pregnant woman for several months, postpone my usual vacation in consequence of the engagement, and then learn that another physician has been called in to attend the confinement, and all because some busybody among the neighbors talked about the other doctor being so fine in obstetrical cases."

The Acme Manufacturing Company, 18 North Grove Street, Elgin, Illinois, is circularizing the man on the streets or in the street cars, and the circulars oftentimes fall in the hands of women, young girls and children, offering "the perfected vacuum developer" for the sexual organs of man, at the reduced price of $10.90, regular price $15.00. Is it not possible for someone, be it better business bureaus or officials, to put a stop to such a nauseating swindling game?

A woman tourist traveling through one of our Indiana cities called up a leading surgeon and said: "I understand that you are the leading surgeon in this community, and being a stranger in the city I would like to obtain some trustworthy information from you. Can you give me the name and address of the leading chiropractor?" The surgeon retorted, "You don't need the address of a chiropractor; you need to make the acquaintance of the superintendent of the feeble-minded school."

Dr. William A. Doeppers has resigned as treasurer of the Indiana State Medical Association and felt it necessary to take that step in view of the fact that he has accepted a very responsible position with the Eli Lilly Company. Doctor Doeppers has been a very efficient treasurer, and has conducted the affairs of his office in such a systematic manner that his service has reflected credit upon his business ability. His successor will be elected at the Indianapolis session in September.

On every hand we hear about the greatly reduced prices of all commodities, but so far as we have noticed, there has been little or no reduction in the price of surgical instruments, drugs, or equipment used by the physician. The average physician is making all sorts of concessions to his patrons, including discounting of bills, and quite frequently actual donation of charges made for professional services, and yet we haven't been able to note concessions of any kind whatsoever to the underpaid doctor.

The Lord deliver us from any more bureaus or commissions. The majority of them cost a good deal in money and time. So far as beneficial results are concerned we do not recall hearing of any one that has brought about any tangible good results. The Wickersham Commission cost a small

fortune, and is a flat failure. The Bureau on the Cost of Medical Care is an expensive luxury, and it is questionable if any real tangible good will come therefrom. Bureaus and commissions may be all the style, but let's change the style!

JUDGING from the number of unemployed men who are selling apples on the streets of our large cities it would seem that someone has been repeating the old saying, "An apple a day keeps the doctor away". Which reminds us of the remark of a vaudeville actor who said, "I have been running around with a doctor's wife lately so I have been eating an apple every day." Apples, like any other fruit, are beneficial, but they haven't all the virtues ascribed to them. In fact, apples disagree with the digestion of many people.

THE *Literary Digest* for May 30, 1931, makes some pointed comments on the subject, "How to Pick a Doctor," and intimates that a stranger in a strange city, unless he uses unusual discernment, is just as apt to pick a quack as a reputable physician. We confess that we consider the question not easy to answer, although we believe that a stranger in a strange city will not make any serious mistake if he calls up the superintendent of the leading hospital and merely requests that the most prominent general physician or specialist on the staff be asked to give him attention.

E. ROLAND PERDUE, formerly of Indianapolis, and accused of quackery and bootlegging, to say nothing of receiving a lot of unfavorable newspaper notoriety in connection therewith, seems to have sought new fields and is reported to be in Illinois at present where, it is alleged, he is indulging in the Hoxsey Cancer Cure fakery. It is reported that he sends the cure to his dupes with fifty dollars C.O.D. charges attached, and is able to collect. It is hoped that the Illinois authorities will put PerDue out of business, even if they do not succeed in giving him drastic punishment.

A MEDICAL quack of Muscatine, Iowa, who is operating a radio for the dissemination of misleading medical ideas and to advertise his own proprietary medicines and treatment, to say nothing of maligning reputable medical societies and medical men, has received notice from the radio commission that his station is to be closed. Commenting on this the Federal officer said, "A license to operate a radio station is in the nature of a public franchise and should be used in the interests of the public and not for the personal interests of the owner."

IN a paper entitled "Is Insulin Reducing Diabetic Mortality?", Dr. L. J. Palmer, in *Northwest Medicine*, following an analysis of cases, said, "This study tends to prove that insulin has increased the span of existence for the diabetic and has decreased diabetic mortality. If this change has not been as great as it seems it should have been it is because in the vast majority of instances the treatment of the diabetic has consisted of the administration of insulin with almost utter disregard for the other important essentials of an adequate diabetic regimen."

PATHOLOGICAL laboratories are now advertising the Ascheim-Zondek test for pregnancy, which is said to be accurate in over ninety-eight percent of all cases, and is a great aid in the diagnosis of tubular or extra-uterine pregnancies. The test is of especial value as an aid to the physician in differentiating tumor formation from pregnancy. It can be used in doubtful cases as early as five days after the anticipated menstrual period, and also can be used in doubtful cases where other methods of determining pregnancy have failed. The test is made by inoculating immature female rabbits with specimens of fresh urine from the patient.

MANY physicians may be guilty of sharp practices in their efforts to get all they can out of a really good patient financially able to pay, and yet when all is said and done there isn't one physician out of a thousand who hasn't more charity, sympathy and human helpfulness in his everyday conduct than ten times that number of people in the ordinary walks of life. The average physician has his faults, and perhaps many of them, for he usually is his own worst enemy, but he does administer to the sick poor at any and all times, whether recompensed for it or not, and never asks that a medal be conferred upon him for so doing.

EVIDENTLY we struck a popular chord when we sounded a note of recommendation concerning the proposed new home for the A. M. A., for we have received favorable comments from not only Indiana but from several other states. In talking about changing the location of the A. M. A. home we have only in view the best interests of the Association and the wish that a home may be established in the suburbs of Chicago that not only will be a credit to the great American Medical Association from an esthetic point of view, but give us a home that will be ample for expansion and away from the dust, noise and ugly outlook at the present headquarters.

AT the last session of the Colorado legislature the chiropractors missed recognition by one vote. That was a close call, and we congratulate the medical profession as well as the people of Colorado upon refusal of the legislature to recognize the chiros and their dangerous teachings. We learn from *Colorado Medicine* that the chiropractors had the support of two members of the regular medical

profession, and those deserters have been reprimanded by an appropriate resolution passed by the Colorado State Medical Society. In reality medical renegades like the two mentioned should be ashamed to show their faces in respectable medical company.

RECENTLY we received for publication in THE JOURNAL a paper the author of which attaches to his name a long string of degrees some of which presumably were obtained abroad and most of which may be of questionable merit. The author neglected to add a degree to which he is entitled, namely, "A S S", although had we published his paper the readers of THE JOURNAL would have understood that the appendage was missing though deserved. "Old Pappy Allen," Dean of Rush Medical College in the early days, used to say that a doctor parading all of his various degrees, is a pompous individual and one "weak in the upper story".

WE are rather amused to read in some medical journals that the lay press misrepresents the best medical practice and in the same number of those medical journals we find the advertising of nostrums and a variety of so-called remedies which the Council on Pharmacy and Chemistry of the A. M. A. has pronounced of no value in medicine. It seems to us that an editor who himself misrepresents the medical profession in his efforts to induce physicians to prescribe and recommend medicinal preparations which he must know have little or no value has no business throwing stones at the lay press, for he is misrepresenting the medical profession. When you live in a glass house you shouldn't throw stones!

THE chiropractors plan to put a number of their membership in the next Indiana legislature, and it is reported that the chiropractic association will select the men who are to run for the legislature and that the candidates will be backed by finances from the association. To raise money for the purpose the chiropractors propose to give card parties and other entertainments for which admission will be charged. Well, that is the system, for money talks, and a full treasury will do wonders in spreading propaganda and influencing votes. Perhaps when the next political campaign rolls around we too will have come to our senses and decided to engage in practical politics for the benefit of not only the medical profession but the public as well.

STEDMAN'S MEDICAL DICTIONARY (11th revised edition) says that the liver is on the *right* side, and is the largest gland in the body. Dorland's Medical Dictionary (15th edition) admits that the liver is a large gland but says that it is on the *left* side. Both of these dictionaries admit that the spleen is on the left side, so they do agree upon the location of one of the principal glands of the body. At least one of these popular dictionaries might have said that the heart usually is on the left side, but neither of them say a word about the position of the heart and leave us guessing as to its location. Perhaps the editors have heard the old saying about having the heart in the mouth, and therefore are a little afraid to give it a definite location.

RECENTLY we talked with a prominent California physician who informed us that State Medicine is looked upon favorably by a considerable number of the medical men on the Pacific Coast, and he gives as a reason that many physicians would rather be on a straight salary that insures at least a comfortable living than presumably earning a great deal more a large portion of which never is collected. However, there is a lot of false reasoning in the supposition that government jobs for all physicians will prove entirely satisfactory. In fact, in the end, governmental medicine will prove unsatisfactory to public and members of the medical profession alike. Right now a few fellows may be quite satisfied with government jobs, but wait until we all have to depend upon government jobs, and see what happens. Our friends who are thinking about approving State Medicine better take another think!

OUR readers may remember that a year or so ago we called attention to a man styling himself Dr. William A. Oyler claiming to practice medicine in Cicero, Indiana, who went about the state begging from physicians, and his story at that time was that he was trying to get together enough money to reestablish himself in medical practice. Investigation showed that the scheme was fraudulent in intent and purpose. Obviously the same man has been working in Illinois, and it is reported that he has stepped across the line into Iowa where he is doing a profitable business in panhandling physicians. State medical journals will do well to warn readers to avoid giving aid or comfort to any panhandling physician, and in particular anyone using the name of Dr. William A. Oyler. More detailed information may be obtained by writing the Bureau of Investigation at the A. M. A. office in Chicago.

WITHIN a week or ten days following the mailing of this number of THE JOURNAL the Indiana State Medical Association will convene in annual session at Indianapolis, on Wednesday, Thursday and Friday, September 23rd, 24th and 25th. We have been more or less in touch with all of the activities of the Association throughout the past year, and we feel that the general membership of the Association should know how generously and faithfully the various officers and committees have worked in the interests of the

Association. The members of the Bureau of Publicity especially deserve credit, but as much may be said for those in the executive office, the members of the Council and the various standing committees. Never in the history of the Association have we had more or better workers in the interests of the Association and all that it represents. Each and every member of the Association should recognize that fact.

ONE of our medical friends says that he has trouble in convincing people that he should be paid for an examination of the apparently well, or in other words to make a periodic physical examination in accordance with our oft-repeated recommendations of the last few years. It seems to us that the argument should be put forth that anyone is justified in avoiding danger, and a health examination not only discovers illness that perhaps is not recognized by the patient and which can be treated to best advantage before it is too late, but it also gives an opportunity to remove hidden handicaps which diminish health, happiness, efficiency and rob life of much of its pleasure. A health examination, as has been pointed out so frequently, if properly conducted, will give a feeling of confidence and relief. To some of the unthinking the blunt argument may be given that an examination costs less than an illness, and it might be well to add further that an illness usually costs less than a funeral.

DR. B. D. MYERS, of Bloomington, secretary of the Indiana University School of Medicine, says that two statements are reported to have been made at the Child Health Conference held at Washington which, whether true or not, demand thorough investigation and if possible correction. The first statement was that the death rate in obstetrical cases is higher in America than in any other civilized country. The second statement is that the records show that death itself in cases handled by midwives is less than those handled by physicians. Doctor Myers says that the best method to correct this in Indiana seems to be to give the public more knowledge concerning prenatal care, and the University, therefore, is planning a program of such character. According to this program, speakers will make talks throughout the state upon the subject. The executive committee of the Indiana State Medical Association has approved the suggestions made by Doctor Myers and has promised that the Bureau of Publicity of the Association will cooperate with the University in the matter.

SOME three or four years ago a book entitled "Microbe Hunters," written by Paul De Kruif, came off the press of Harcourt, Brace & Co. It caused quite a stir in scientific circles. The general public found it mighty interesting and instructive reading, but the blue-bloods of bacteriology were greatly offended by the free and easy way that the author treated the great and the near-great. As for ourselves we enjoyed it immensely and often have thought that we learned more bacteriology per minute in reading it than ever before or since. A few evenings ago the title of the book attracted the eye, and we have been mighty well entertained on hot summer nights going through it again. We commend it most heartily to our readers. It's a pity that we haven't more writers—not too many of them—who can write like this man De Kruif. It would be hard to find fiction that would better hold the interest of the reader. The romance of modern medicine is too easily forgotten by the man who has to turn out in the middle of the night for an emergency call. Here is something that will counteract the deadening effect of too hard grubbing.

WE had thought that surgical removal of the inferior turbinates in order to facilitate nasal breathing was an obsolete procedure because of its ultimate bad effect upon the patient, but now comes a prominent eastern rhinologist with an article on "The Slaughter of the Turbinates," in which he calls attention to the practice of some general physicians who without any particular education or training for surgical work, are willing to take a whack at anything from tonsils to appendices, and many of whom now are not overlooking the possibility of getting a hole through obstructed nasal passages by removing an inferior turbinate. He points out the fact that most nasal obstructions are not due to large or hypertrophied turbinates, but to other pathology which should be given appropriate attention, the chief of which are malformations of the nasal septum and purulent inflammations of the paranasal sinuses. Whacking out one or both inferior turbinates may make a hole through the nose, through which the patient may get some air, but the atrophy and dryness due to disturbance of the natural secretions that follows is a terrible penalty for the patient to pay for confidence in a bungling physician.

AN officer of an eastern medical society solemnly proposes that right now during this period of depression is a good time for physicians to announce that they are quite willing to agree to a moratorium concerning the payment of bills for professional services rendered, and even to extend further credit. Why bless his dear soul, we physicians in the Middle West have been doing that sort of thing for a long time. We didn't have to adopt it either, for it was forced upon us. However, we haven't noticed any extension of moratorium by the county and city treasurers, by the office landlords, telephone companies, physicians' supply houses, or even the office girls. We shall let someone else answer the question as to what the heck will come next. We are reminded of the poor devil who had been out of work for a year

and managed to borrow enough money to pay his taxes, which included an allotment for public improvements among which was included municipal golf links. Upon getting his tax receipts he said, "Isn't it perfectly fine that we can pay for golf links so that we can learn to play golf when we can't get any work to do?"

We have received a complaint from a physician who says that he is a member of his county, state and the national medical organizations, and so far as he knows possesses an untarnished professional and personal reputation, and yet he is unable to take any of his patients to any one of the local hospitals in his home city because the hospitals there are the so-called "closed" hospitals. He asks for advice as to what to do, and we confess that it is difficult to make suitable answer. We are of the opinion that if he has the right amount of fighting blood in his system he can be admitted to some of the hospitals, for we don't believe that either hospitals or medical profession can stand the criticism that would be heaped upon their heads by lay press and public through exposure of uncalled-for autocracy. The "closed" hospital proposition has been overworked, and to the detriment of medical profession and public. If some of the "closed" hospitals started housecleaning they would remove from their organizations some men unsuited for preferment, and find it advantageous to take in some men from the outside who perhaps have more and better qualifications.

Ephedrine is a very valuable and useful drug, but its use is very greatly abused, for it is now one of the universally self-prescribed remedies the general employment of which has been brought about first by physicians, secondly by manufacturers who publish directions for use, and thirdly, by the druggist who does a large amount of counter prescribing. From the banker and the professional man down to the gum-chewing flapper and the street cleaner the standard remedy for a cold in the head is an ephedrine in oil solution of some kind which may be obtained for the asking at any drugstore. Self-prescribing is a dangerous proposition in a large percentage of instances, and it is harmful when it comes to the use of ephedrine solution, for now nose and throat specialists are reaping a harvest of cases in which there is turgescence and flabby nasal mucous membranes, with the accompanying stuffy and dry feeling in the nasal passages, as a chronic after-effect of too much ephedrine, which, like cocaine, is a very valuable drug to be used in certain conditions but is a very harmful drug if used indiscriminately. In connection with other treatment it may be very beneficial in acute congestions of mucous membranes, but there its benefit ends.

Whenever anyone feels called upon to find fault with the members of the Board of Medical Registration and Examination it is well for him to take into consideration the fact that the Board is acting as a judicial body and trying to treat everyone with absolute fairness and at the same time carry out the provisions of the law. As now constituted the Indiana Board is a representative one, and we believe that it is doing a very creditable piece of work. As a mere side issue we fail to understand why the members of the Board will stick to the job when the compensation is insignificant and there is no particular honor connected with the position. There is only one thing that influences most of the men who are on the Board and that is the real desire to do something that is constructive in raising and maintaining the standards of medical practice in the state of Indiana. It is a good thing that we have a few men who are willing to make such sacrifices in the interests of the betterment of conditions for someone. We admit that we have had some Boards that were not representative, and they deserved all the criticism they received. However, those criticisms cannot be offered concerning the present Board, which is composed of high-grade men.

Much has been said concerning advertising in lay papers of some of Indiana's prominent hospitals, and the matter was brought to the attention of the Judicial Council of the A. M. A. The answer in part is as follows: "It is the sense of the Council that the statement concerning the x-ray department, which appeared in the daily press, to say the least is in bad taste if not unethical, and in the opinion of the Council the appearance of the picture of the director of the x-ray and physical therapy department of the hospital in a lay newspaper, in the manner in which it appeared in the newspaper submitted to us, is distinctly unethical. Furthermore, the statement in the newspaper that the x-ray department of the hospital is qualified to diagnose any and all diseases is entirely misleading, and the appearance of the picture of an individual member of a hospital staff in connection with a newspaper statement is not in keeping with the principles of medical ethics." Concerning this matter, the executive committee of the Indiana State Medical Association has made a statement to the effect that there is no objection to a hospital receiving publicity as long as such publicity is of the type which is not against the ethics and principles of the medical profession.

Recently a prominent weekly farm paper published in this state wrote us asking our opinion concerning "Electrovita" and the circular which its manufacturer sends out. We read the little folder and were left speechless. Thinking that the Bureau of Investigation of the American Medical Association could write him a hotter letter we sent the correspondence to them. The letter we got back was a gem, and should set the advertising

manager of the paper to thinking. We wish that every other paper in the state would go to the trouble to get the dope on some of the stuff offered in advertisements. We do not think that a lay paper needs to be as simon pure in this regard as does a reputable medical journal, but certainly the more vicious stuff should be refused entrance into advertising columns. Incidentally the physicians of a community can do a good turn by writing in for information concerning remedies they see advertised in the daily papers and then can send the letters to the editors—if they think it will do any good. We are strongly inclined to think that local physicians can do more in this regard than can anyone else. Many editors would listen to their friends in such matters. We heartily commend the editor of the paper that turned down "Electrovita".

A PROMINENT minister once said about sermons, "Very few souls are saved after the first twenty minutes." We might paraphrase that by saying that very few physicians will pay much attention to an address of over twenty minutes in length. Many contributors to medical journals get provoked when told that their exceedingly long papers, with iterations and reiterations, duplications and reduplications, can be boiled down by a half or two-thirds and still present the subject in a lucid and instructive manner. The story is told concerning one of the most prominent physicians in the United States who sent a long paper for publication in the *Journal of the A. M. A.* The editor refused to print the paper unless it was boiled down, and the author promptly replied that he didn't propose to have anyone tell him how to prepare his papers for publication. Unbeknown to the author the paper was then turned over to a revise writer, who boiled down the paper to about one-third its former length, and the revised paper, under a fictitious name as to author, was sent to the belligerent contributor with the request that his opinion concerning the paper be given. The answer came to the effect that the paper was so good that it should be used in preference to his own. As a matter of fact, no new ideas or thoughts had been incorporated in the revised paper. It is a rare gift to be able to say a great deal in a few words, although it is not necessary to be quite as brief as the man who when asked to give his comprehensive view of married life replied, "It's hell."

IN his presidential address before the Chicago Medical Society (June 17, 1931) Dr. James H. Hutton, in discussing medical charity says: "According to a statement of Dr. Charles Gordon Heyd, published in the New York *Times* January 17, 1931, doctors contribute $365,000,000 in service every year ($1,000,000 per day). They take care of 500,000 free cases per day. One-eighth of the entire population pays nothing for its medical care. The staff of Cook County Hospital, Chicago, takes care of 50,000 free cases per year. Probably the combined charity services of other hospitals in Chicago equal this, not to mention the various dispensaries and out-patient departments. There is something wrong with the economic set-up of a society which imposes such a tremendous burden on one small group. A social condition which forces this on a profession, and in addition permits its abuse by a group of paid uplifters and foundation directors, is as outrageous and dangerous as the economic situation which keeps five million willing workers out of employment today. I note that some of the organizations and individuals who have been loudest, most ignorant and most unfair in their shouts against medicine are themselves beneficiaries of the greed and cupidity which led to the present economic breakdown. If we make sheep of ourselves we may expect the wolves to eat us. Instead of too much cooperation with groups that wish to pick our pockets in the name of child welfare, foundation work, or pseudo-public health movements, we need active, intelligent opposition to some of these unworthy schemes."

"How Soon Forgotten" has been brought to our attention through the death of an old, once-prominent and highly respected physician in one of the populous Indiana communities where for ten years of retired life the once popular and well-liked physician scarcely ever saw any of his former medical friends. It is reported that his professional reputation was untarnished, he was a leader in his local medical society, and so far as known he had no professional enemies. However, during the declining years of his life, when the days might have been made brighter by an occasional visit from old as well as young confreres, he was ignored. It is a sad and pathetic commentary upon our present mode of life which seems to be wrapped up so much in personal selfishness. Our profession is undergoing many constructive changes, and no doubt will undergo many more during the next few years, but it will be a pity if we entirely lose sight of every social contact among medical men that means so much in bringing about a better understanding of each other in the development of a greater spirit of helpfulness and, in the end, better and a more unified profession. We are soon forgotten when we are dead, but there is no excuse for the carelessness and indifference which prompts us to ignore and perhaps forget the old and respected living members of our profession who though perhaps unable through physical infirmities to continue active practice, still are worthy representatives of the profession and whose waning days may be cheered and made brighter by even slight attention from earlier friends and associates.

IN *The Journal of the A. M. A.* for August 15, 1931, the Bureau of Investigation of the A. M. A.

reports on the so-called Kaadt diabetes treatment, which it is reported originated with Dr. C. F. Kaadt, of 339 Brackenridge Street, Fort Wayne, Indiana. One is led to believe that the treatment is pure quackery, and the surprising feature of the report is that the originator and proprietor of the so-called "diabetic laboratories" is credited with being a member of the local, state and national medical associations. According to regulations, if a physician is a member of his county medical society, that membership entitles him to affiliation with the state and national medical associations. The question now arises as to what the county medical society should do when a member presumably is guilty of the rankest kind of quackery. Well, when you begin to tell county medical societies, particularly those with large membership, that some of the members are guilty of quackery, it is sometimes a little difficult to know where to stop. Then again, as we often have said in THE JOURNAL, it is comparatively easy to get a physician into a medical society but it is quite another thing to get him out. Medical organizers have been preaching to us the advisability of taking into our medical societies nearly all of the regular physicians on the assumption that we either can reform those known to be guilty of objectionable practices, or at least have better control of their activities. To use a slang phrase "that is applesauce," for once a quack always a quack, and you can't reform him. We are reminded of the story of the fine girl who married a disreputable rake to reform him, but instead of reforming him she finally was brought down to his level.

THE average physician never reads his insurance policies, and it is a serious mistake not to do so. Generally speaking, the larger and better companies do not resort to technicalities in order to cancel the policy or to avoid payment of claims. Smaller companies, and especially the assessment companies, usually have a rather bad reputation when it comes to furnishing dependable protection. Within the last few years some of the old well-known and responsible health and accident insurance companies have been issuing a non-cancellable policy which, of course, is issued to applicants who at the time of taking out the insurance are considered good risks. Such policies are very desirable and should be looked upon favorably by physicians, for one never knows when insurance may be needed, and it is a little discouraging to find that when the insurance is needed, or the same is in process of adjustment, the insuror is using every endeavor to avoid the payment of the claim and winds up the transaction by cancelling the insurance. In short, there are not a few insurance companies that are perfectly fine in their treatment of policyholders as long as premiums are being paid and no claims are presented, but the Lord have mercy on the policyholder's soul if he has occasion to recover some of the benefits presumably provided by his insurance policy. Nowhere is this more evident than in sickness and accident insurance, and every physician and surgeon with a large practice sees a good deal of this near swindling of his patients who have counted upon the protection of an accident or health policy in time of real need, and when one of them has a claim finds the policy "a lemon". Physicians and surgeons should profit by this knowledge when they come to buy protection for themselves.

DEATH NOTES

CHARLES STOLTZ, M.D., of South Bend, aged sixty-seven years, died suddenly August 3rd, following a heart attack. Dr. Stoltz had been in ill health for several years.

Dr. Stoltz received his early education in district schools and at the normal school at Valparaiso. For five years he was a teacher. He attended the University of Illino's College of Medicine



CHARLES STOLTZ, M.D.

(then the College of Physicians and Surgeons of Chicago), from which he graduated in 1893. He took up the practice of medicine in South Bend, where he practiced for almost forty years.

Dr. Stoltz was especially known for his ability as a surgeon and obstetrician. He was a member of the medical staff and a teacher in the training school for nurses of Epworth Hospital, South Bend, and was a member of the St. Joseph County Medical Society, the Indiana State Medical Association, the Northern Tri-State Medical Association, a Fellow of the American Medical Association, and a Fellow of the American College of Surgeons. He also was a Fellow of the Indiana Academy of Science.

ROBERT LEE, M.D., of Oxford, died August 15th, aged sixty-four years. Dr. Lee graduated from the Kentucky School of Medicine, Louisville, in 1890.

WINFIELD S. BRANDON, M.D., of Daleville, died August 17th, aged seventy-nine years. Dr. Brandon graduated from the Medical College of Indiana, Indianapolis, in 1882.

GEORGE L. MCNEAL, M.D., of Kokomo, died August 8th, following a stroke of paralysis. Dr. McNeal was sixty-nine years of age. He was a graduate of the Eclectic Medical College, Cincinnati, in 1898.

JACOB E. KITCHEI, M.D., of Galveston, died August 15th, aged fifty-six years. Dr. Kitchei was a member of the Cass County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis, in 1902.

NEWS NOTES AND PERSONALS

THE Lawrence County Medical Society held its regular monthly meeting at the Bedford Country Club, August 6th.

THE Tipton County Medical Society held a short meeting at the office of Dr. G. H. Warne, in Tipton, August 14th.

THE Interstate Postgraduate Medical Association of North America will hold its meeting at Milwaukee, Wisconsin, October 19th to 23rd.

DR. E. E. JOHNSTON, until recently at Kingman, has located in Covington, where he has purchased the office and good will of the late Dr. C. C. Wert.

KARL M. BEIERLEIN, M.D., has announced the opening of offices in the Wayne Pharmacal Bldg., of Fort Wayne, for the practice of obstetrics and gynecology.

DR. WILLIAM T. ESTES, of Gaston, who claims to be Indiana's oldest practicing physician, celebrated his eighty-seventh birthday anniversary August 11th.

THE complete program for the State Health Officers' Conference to be held in Indianapolis, September 22 and 23, 1931, appears in this issue of THE JOURNAL under Societies and Institutions.

AT the last regular meeting of the State Board of Health, Dr. Thomas W. Oberlin, of Hammond, was elected president of the Board, and Dr. A. C. McDonald, of Warsaw, vice-president, for a term of two years.

THE Gibson County Medical Society held its meeting at the Methodist Hospital, Princeton, August 10th. Dr. W. C. Caldwell, of Evansville, presented a paper on "The Laboratory's Place in Clinical Diagnosis".

EARL E. JOHNSON, M.D., recently of Kingman, has located in the office of the late Dr. C. C. Wert, of Covington, and would like to sell his place at Kingman, or will rent it to some physician who would like to give the place a trial before purchasing the property.

ANNOUNCEMENT has been made of a postgraduate course in ophthalmology, extending over one year and costing $1,000, to be given in Chicago. Full details may be obtained from Dr. R. C. Gamble, Secretary, 30 North Michigan Avenue, Chicago.

MEYER WIENER (*American Journal of Ophthalmology* for June, 1931) says that the physician's use of epinephrine solution in the eyes tends to prohibit the progressive development of myopia. In his opinion the treatment ought to be continued from one to three or four years.

DR. W. E. HASTINGS, of Mount Vernon, had his left hand amputated August 4th. The amputation was necessary as the result of an infection originating from x-ray burns with which Dr. Hastings experimented several years ago. Dr. Hastings has retired from the active practice of medicine.

THE late Dr. Charles Stoltz, of South Bend, bequeathed $100 to the research fund of the Indiana Academy of Science, and left a bequest of $5,000 to Indiana University at Bloomington, in memory of his son, Charles Raymond Stoltz, who died at the age of sixteen years. This sum is to be invested by trustees of the University and the proceeds used annually in paying for a scholarship to a senior man majoring in American History in Indiana University.

DR. JOHN SUNDWALL, director of the Division of Hygiene and Public Health of the University of Michigan, Ann Arbor, will be a principal speaker at the State Health Officers' Conference at Indianapolis September 22nd and 23rd. Dr. Sundwall is also president of the Washtenaw County Medical Society and chairman of the Committee on Legislation and Public Relations of the Michigan State Medical Association. His address will be given at the noon luncheon meeting on Wednesday, September 23rd, on the subject, "The

Doctor and the New Human Conservation Movement". Dr. F. S. Crockett, president-elect of the Indiana State Medical Association, also will address the Conference on the subject, "Organized Medicine and Public Health Agencies".

Arrangements have been made to broaden the scope of the newspaper work started seven years ago by the Bureau of Publicity of the Indiana State Medical Association by the addition of news service through the Dental Health Council of the Indiana State Dental Association. Bulletins upon the care and protection of teeth, similar in type to releases upon health and scientific medicine that have appeared, will be published. The articles will give facts about dentistry in language that the layman can understand and will be written in style that will be interesting and instructive from a news standpoint. This will represent the first attempt of the dental profession in Indiana to disseminate public health information. In all bulletins of the Dental Health Council names of individuals will be omitted, but the Council will assume responsibility for the scientific accuracy of all releases.

In connection with the Conference on Child Health and Protection held at Winona Lake July 6th to 11th, a conference of dentists, physicians and others was held at which the five-year oral hygiene program of the State Dental Association was presented and discussed. Fred R. Houck, D.D.S., of Huntington, who is chairman of the Oral Hygiene Committee of the State Dental Association, presented the program. In brief, the program to be carried out by the State Dental Association, in cooperation with the State Board of Health, through schools of the state has the following objectives:

(1) A comprehensive educational program for educators, parents, teachers and students. A program that will increase the interest and pride of all in a clean and healthy mouth.

(2) A dental examination of all grades in the public schools coordinated with a systematic follow-up of such examination.

(3) All school pupils instructed in "How to Build and Maintain Sound Teeth".

As incidental objectives in accomplishing this program, the State Association will endeavor to have established a division or department of dental hygiene in the State Board of Health with a qualified dentist as director of the department; to secure the appointment of a competent dentist on the staff of every hospital; to have school textbooks include scientific information on how to build and maintain sound teeth; to have dental health included in teacher training; to organize district and state oral hygiene conferences and to develop leadership for a dental health program in each county of the state.

The Winona Lake Conference was attended by approximately fifty representative dentists, about fifteen physicians and by representatives of the State Board of Health. The Indiana State Dental Association is to be congratulated upon having adopted a definite oral hygiene program. The State Board of Health will give all assistance possible toward the success of this program.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:
- Capsules Pentobarbital Sodium-Abbott, 1½ grains.

Eli Lilly & Co.:
- Pulvules Pentobarbital Sodium - Lilly, 1½ grains.
- Elixir No. 229 Ephedrine Sulphate, 2 grains.

Parke, Davis & Co.:
- Ventriculin, 100 Gm. bottle.

Sandoz Chemical Works, Inc.:
- Sandoptal:
  - Tablets Sandoptal, 0.2 Gm.

Nonproprietary Articles:
- Pentobarbital Sodium.

INDIANA UNIVERSITY NEWS NOTES

Dr. Tyler Stroup, who received the doctor of medicine degree from the Indiana University Medical School in 1930, and Miss Mae Lybrand, of Indianapolis, were married July 1st. Dr. Stroup is practicing medicine in Indianapolis.

Dr. Daniel Bernoske, graduate of the Indiana University Medical School in 1929, has opened an office for the practice of medicine in Michigan City, his home town. Dr. Bernoske was married July 6th to Miss Helen Evand, Indianapolis.

Dr. Donald Reed, graduate of the Indiana University Medical School, made the highest grade of the 131 doctors taking the Indiana State Medical Board examinations this month. One hundred and seventeen of the 131 doctors were licensed to practice in the state. Fourteen failed to make a passing grade.

The fall semester of Indiana University will open Wednesday, September 9th, with the beginning of freshman week. Registration will continue through Thursday, Friday, Saturday and Monday. Enrollment in classes will take place Monday, September 14th, and regular classroom work will start Tuesday, September 15th.

Enrollment figures in the Indiana University School of Medicine and other outstanding medical schools in the United States and Canada indicate a great increase in the number of applicants for admission, according to Dean B. D. Myers of the

I. U. medical school. More than 650 students applied for admission in the Indiana University Medical School, he explained, with only 134 admitted.

DR. RALPH LESER, who received the M.D. degree from the Indiana University School of Medicine in 1930, is serving for a period of six weeks as prison doctor in the Eastern State Penitentiary. At the end of that time he will return to the General Hospital of Philadelphia, Pennsylvania, where he is serving his internship. Dr. Leser is the son of Mrs. Hedwig Leser, a member of the Indiana University German department faculty.

A TOTAL of 1,971 patients were cared for during the month of July by the three Indiana University hospitals at Indianapolis. This is an increase of 320 over July of last year, the records show. Six hundred and eighty-three of the patients were bed-patients, while the remaining 1,288 were out-patients.

The James Whitcomb Riley Hospital for Children served the largest number of people, with a total of 990 patients. The William H. Coleman Hospital for Women came second with 491 patients, and the Robert W. Long Hospital third with 490 patients.

The daily patient average for the three hospitals during July was 386.69 as compared with 375.01 for July of last year.

The Indiana University Medical Center was represented at the 1931 State Fair in Indianapolis with exhibits and demonstrations from the medical school, the nurses' training school, the dental school, and the university hospitals. Dr. Thurman B. Rice prepared an exhibit on cancer, with emphasis on early diagnosis and early treatment. The Riley Hospital presented a demonstration of its work in brace making. I. U. nurses illustrated home nursing procedures. The occupational therapy department put on a display of basketry and weaving done by convalescent patients in the Riley Hospital. The dietary department conducted work on foods. The dental school held its usual clinic for examination and the charting of the teeth of children. Dr. E. T. Thompson, administrator of the Indiana University Hospitals and School of Medicine, gave an illustrated lecture daily on the Indiana University stage program and had general charge of the medical center exhibits. Dr. Thurman B. Rice, of the medical school, prepared the cancer exhibit. Mrs. Ethel P. Clarke, director of the nurses' training school, supervised the nursing demonstrations. Miss Lute M. Troutt directed the exhibit on foods. Miss Winifred Conrick, head of the occupational therapy department, was in charge of the exhibit from that department.

Dr. Karl Kayser, of the school of dentistry, displayed specimens of the laboratory technics of dental school students.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

July 14, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held July 7th read and approved.

Newspaper release, "Vacation, Typhoid and Paratyphoid Vaccination," read and approved for publication July 25th.

Radio release, Saturday, July 18th—"Food Fads Passing."

The following letter was received from the Director of the Bureau of Medical Economics of the American Medical Association:

"It was a pleasure, indeed, to be able to be of some service to you in connection with your July 4th broadcast. You certainly did a very good job in utilizing the material and building an interesting health talk.

"If you do not know it already, I wish to state that we are using many of the Bulletins issued by the Indiana State Medical Association for our five-minute health talks."

The Bureau read with interest pamphlet No. 23 entitled "Medical Amateurs," one of the series of radio talks on "Devils, Drugs and Doctors" that are being delivered by Howard W. Haggard, M.D., Yale University, each Sunday evening over the Columbia Broadcasting System. According to the announcement these broadcasts are being sponsored by the Eastman Kodak Company, Rochester, New York, as a tribute to the medical and dental professions. The secretary was instructed to write the following letter to the Eastman Kodak Company in regard to these talks:

"We wish to compliment you upon the series of radio talks given by Dr. Howard W. Haggard on "Devils, Drugs and Doctors." The Bureau of Publicity of the Indiana State Medical Association prepares articles for the press of Indiana and also for a local broadcasting station. We would like very much for you to send us the back numbers of Dr. Haggard's talks and place us upon your mailing list. This is indeed splendid material and upon behalf of the physicians of Indiana we wish to thank the Eastman Kodak Company."

Requests for places upon the mailing list for the weekly bulletins have been received from Edwin V. O'Neel, editor, *The Exponent*, Hagerstown, Indiana, and Walter Shead, editor, *The Indiana Democrat*, Indianapolis.

The July, 1931, bulletin of the Better Business Bureau was reviewed by the Bureau of Publicity, under the heading of "More Quackery Prevented in Indianapolis". The bulletin tells of the failure of the Overbeck Rejuvenator Corporation to establish itself in Indianapolis. The bulletin reads in part:

"In April of this year, Mr. Henry Watterson came to Indianapolis and endeavored to establish an office of Overbeck's Rejuvenator Corp., of U. S. A., to sell to the Indianapolis sick and ailing another one of the many therapeutic devices that have been promoted during the past few years. According to literature, the Overbeck rejuvenator, called 'The Elixir of Life Machine,' is the invention of Mr. O. C. J. G. L. Overbeck, F.R.S.A., F.C.S., F.G.S., F.P.C. (London), etc., an English scientific chemist of Chantry House, Grimsby, England, and was evolved by him as the most perfect method of practical application of his New Electronic Theory of Life and Rejuvenation.

"There seems to have been very few diseases of importance overlooked by Overbeck in listing the number where the Overbeck rejuvenator 'has been used with wonderful success'. In addition to sexual debility and sexual neurasthenia, which are prominently catalogued, the following diseases are listed:

"Asthma, bladder weakness, bunions, bronchitis, chilhlains, catarrh, cramp, constipation, debility, deafness, eyesight, paraplegia, paralysis, agitans, rickets, rheumatism, rheumatoid, arthritis, facial nervous contractions, general weakness, gout, goitre, head noises, headache, heart affections, hair growth and recolouration, incontinence of urine, insomnia, sexual weakness, stammering, sciatica, stitch or sudden pains, toothache, indigestion, irregular blood pressure, lumbago, menstrual irregularities, nervous exhaustion, nervous debility, neuritis, neurasthenia, nightmares, obesity, voice production, wrinkles, etc., etc., etc.

"Although this company had rented office space and were prepared to start their sales campaign in Indianapolis, the cooperation of local radio station WFBM and Indianapolis newspapers, in refusing to accept any advertising, thus prevented their operation in Indianapolis, and to our knowledge not one of the devices was sold here. Other electro-magnetic devices sold as cure-alls by their promoters and against which the Better Business Bureau has issued warnings are Gaylord Wilshire's I-ON-A-CO; Dr. Drollinger's Ionizer, described by him as the 'Electromagnetic life saver,' the Vitonet blanket, Dr. Rodney Madison's Vitrona, an electrical magnet belt patterned after Wilshire's I-ON-A-CO, which was described by the American Medical Association as a 'magnetic horse collar'; and the Theronoid Corporation of America and other electric helts. None of these has ever been successful in Indianapolis."

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole July 21, 1931.

July 21, 1931.

Meeting called to order at 3:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held July 14th read and approved.

Newspaper release, "Infant Care in Warm Weather," read and approved for publication August 1, 1931.

Radio release, Saturday, July 25th—"Infant Care in Warm Weather."

The following communication was received from the American Federation of Organizations for the Hard of Hearing:

"You will remember that at the meeting of the American Medical Association held in Philadelphia you visited our booth and asked us for material for publicity purposes.

"Under separate cover we are sending you some of our pamphlets which will give you an idea of the work of the Federation, its aims and scope. Our annual report, 'The Ten Million', gives a brief outline of the work, and we are sure that you can get additional information from this report.

"If you wish additional copies of any of this material, we shall he only too glad to send them to you.

"We suggest that you get in touch with Miss Janet Shaw, Vice-president, Indianapolis League for the Hard of Hearing, 2803 Washington Blvd., Indianapolis, Indiana. Miss Shaw attended our annual conference in Chicago the week before I met you in Philadelphia, and she is very much interested in the work for the hard of hearing. I am sure she will be glad to tell you about the work of her League.

"If you feel that your department would be interested in articles contained in our official magazine, *The Auditory Outlook*, we shall be glad to welcome you as a member of the Federation. Membership includes an annual subscription to this illustrated monthly magazine, which contains articles of great interest to the deafened. For your convenience we are enclosing a membership blank. We are sure that this magazine will interest the members of your department and we hope that we shall have the pleasure of enrolling you as a memher.

"Please do not hesitate to call upon us if we can help you in any way."

The following postal card was received from the Indianapolis Medical Society:

"EASTSIDE REVIEW DIRECTORY

"It is reported that the publishers of the above directory, in trying to sell advertising space to our members, have stated that a listing in the directory is approved by the Indianapolis Medical Society. If such a statement has been made it is an error. The publishers were told that while it was not strictly unethical, it was considered bad form in this community and that paid listings in trade or commercial publications have always been discouraged by the officers of the Society.

"CHESTER A. STAYTON, M.D.,

July 18, 1931. "Secretary."

The meeting of the Bureau of Publicity was adjourned in order that a joint meeting between the members of the Bureau of Publicity and the Executive Committee of the Indiana State Medical Association and the Dental Health Council of the Indiana Dental Association could be held to discuss further ways and means for the perfection of a publicity service of the Indiana State Dental Association in cooperation with the Bureau of Publicity of the Indiana State Medical Association. For complete minutes of this meeting see minutes of the Executive Committee of July 21, 1931.

The above minutes were approved in each separate part and as a whole July 28, 1931.

July 28, 1931.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

This meeting was given over largely to a joint session between representatives of the Dental Health Council of the Indiana Dental Association and the Bureau of Publicity of the Indiana State Medical Association to draw up a definite arrangement between the Indiana State Dental Association and the Indiana State Medical Association in regard to dental publicity.

The following dentists attended the meeting as a subcommittee of the Dental Health Council: Dr. E. E. Voyles, Dr. J. B. Carr and Dr. E. L. Mitchell.

The following agreement was drawn up:

"Agreement between the Indiana State Dental Association and Indiana State Medical Association in regard to dental and medical publicity:

"To further cooperation between the medical and dental professions of Indiana and to maintain pace with the constantly increasing public demand for authoritative knowledge on scientific subjects arrangements have been made to broaden the scope of the work started seven years ago by the Bureau of Publicity of the Indiana State Medical Association by an additional news service through the Dental Health Council of the Indiana State Dental Association.

"Principal points of this agreement follow:

"I. The Health Council of the Indiana State Dental Association will prepare articles for publication giving facts about dentistry in language that the average layman can understand and in a style that will be interesting and instructive from a news standpoint. The services of an experienced newspaper man, other than an employee of the Bureau of Publicity of the Indiana State Medical Association, will be obtained for this purpose. Each article is to be reviewed carefully by members of the Dental Health Council to make as sure as humanly possible that it is absolutely scientifically correct.

"The articles are to appear in the name of the Dental Health Council of the Indiana State Dental Association approved by the Bureau of Publicity of the Indiana State Medical Association.

"II. The Bureau of Publicity of the Indiana State Medical Association agrees:

"1. To distribute each dental release to the names contained on the mailing list of the Indiana State Medical Association in addition to names supplied by the Dental Health Council.

"2. To distribute these dental releases, as nearly as possible, once a month. Occasions may arise when it is important to publish a medical article on the date regularly set for a dental release. In such pressing cases the Bureau of Publicity upon notifying the Dental Health Council may publish the medical rather than the dental article. Similar privilege is granted to the Dental Health Council.

"3. To use the addressograph machine of the Indiana State Medical Association for such releases under conditions named below.

"III. The Dental Health Council of the Indiana State Dental Association agrees:

"1. To pay all costs for preparation, addressing and mailing once monthly (or whenever sent out) dental releases.

"2. To follow general rules already laid down by the Bureau of Publicity in regard to mentioning names of doctors in active practice in Indiana and in handling any material which might under any circumstance give unwarranted publicity to any individual doctor or dentist.

"3. To present copy of each article to the Bureau of Publicity for criticism and approval. This copy should be presented two weeks before publication date as it is best that these articles be on hand in time for consideration at the regular weekly meeting of the Bureau of Publicity on each Tuesday.

"4. To supply and keep up-to-date metal address plates (costs approximately five cents each per 100) of names of dentists, etc., to whom releases are to go. To send formal notice to editors announcing news service by Dental Health Council.

"5. To pay for exact time it takes one girl at office to address envelopes on addressograph machine. The price for this service is estimated for the present at $1.00 for each release. (No folding or stuffing to be done by medical association personnel.)

"6. To employ services of clipping bureau and check results on its own behalf.

"7. To pay all expenses incident to the preparation and distribution of a formal notice to be sent to the editors of the newspapers of the state and other names on mailing list announcing this new service by the Dental Health Council.

"8. The foregoing agreement will remain in effect until further notice.

"F. R. HENSHAW,
J. B. CARR,
W. I. MCCULLOUGH,
E. L. MITCHELL,
E. E. VOYLES, *Chairman*,
Dental Health Council,
Indiana State Dental Association.

J. H. STYGALL,
C. P. EMERSON,
WM. N. WISHARD, *Chairman*,
Bureau of Publicity,
Indiana State Medical Association.

THOMAS A. HENDRICKS, *Exec. Sec'y*,
Indiana State Medical Association.

The following question was brought to the attention of the physicians and dentists: A question arises as to the most equitable way to pay for postage, etc., for sending each release to those named on the dental list. Dr. Voyles estimated that 300 names will be added. If these dentists are to get the medical as well as dental releases the cost to the Bureau will be considerably increased. It was decided that this question should be taken up at a later time.

Upon adjournment of the joint meeting the executive secretary made a report to the Bureau of his attendance at the funeral of Dr. H. O. Shafer, Rochester, Indiana. A fitting tribute to Dr. Shafer was paid by practically every citizen in Rochester and by more than fifty physicians from the northern part of the state who attended the funeral.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole August 4, 1931.

INDIANA STATE BOARD OF HEALTH PROGRAM
STATE HEALTH OFFICERS' CONFERENCE
September 22 and 23, 1931

TUESDAY, SEPTEMBER 22.

Forenoon Session.

Presiding—Thos. W. Oberlin, M.D., President, State Board of Health.

Address—Governor Leslie.

Announcement of Meetings, etc.

"Prevention and Control of Tuberculosis"—J. V. Pace, M.D., Superintendent State Sanatorium, Rockville, Ind.

"How We Organized for a County Nurse"—Wm. E. Amy, M.D., County Health Commissioner, Harrison County, Indiana.

"Our County Public Health Nursing Program"—Margaret E. Reeve, R.N., Harrison County.

"Mosquito Control"—Robert Harris, M.D., City Health Officer, Noblesville, Indiana.

"Malaria in Indiana"—V. K. Harvey, M.D., Epidemiologist, State Board of Health, Indianapolis.

"Sanitation in Mosquito Control"—J. C. Matthews, Asst. Sanitary Engineer, State Board of Health, Indianapolis.

Noon Luncheon.

"The Five-year Oral Hygiene Program"—Dr. F. R. Houck, Chairman, Oral Hygiene Committee, Indiana State Dental Association, Huntington, Indiana.

Afternoon Session.

"Morbidity Reporting"—R. C. Williams, M.D., Asst. Surgeon General, U. S. Public Health Service, Washington, D. C.

"Training of Health Officers"—Thurman B. Rice, M.D., Associate Professor of Bacteriology and Public Health, Indiana University School of Medicine, Indianapolis.

"Responsibility of the Health Officer in Environmental Sanitation"—Lewis S. Finch, Chief Sanitary Engineer, State Board of Health, Indianapolis.

"Rural Sanitation"—H. E. Miller, Sanitary Engineer, Department of Rural Sanitation, U. S. Public Health Service, Washington, D. C.

WEDNESDAY, SEPTEMBER 23.

Forenoon Session.

"Milk Control"—F. C. Wilson, Director, Milk and Dairy Products Division, State Board of Health, Indianapolis.

"Market Milk"—V. C. Manhart, Department of Dairy Husbandry, Purdue University, Lafayette, Indiana.

"Relation of a State Laboratory to Health Officers and to the Medical Profession"—Howard J. Shaughnessy, M.D., Chief Division of Laboratories, Illinois State Health Department, Springfield, Illinois.

"Organized Medicine and Public Health Agencies"—F. S. Crockett, M.D., President, Indiana State Medical Association, Lafayette, Indiana.

Noon Luncheon.

Address—John Sundwall, M.D., Director, Division of Hygiene and Public Health, University of Michigan, Ann Arbor, Michigan.

Afternoon Session.

"Scarlet Fever Immunization in the Gary Schools"—Otis B. Nesbit, M.D., Medical Inspector, Gary, Indiana.

Discussion—Thurman B. Rice, M.D., Associate Professor of Bacteriology and Public Health, Indiana University School of Medicine, Indianapolis.

"Infancy and Maternity Hygiene"—Ada E. Schweitzer, M.D., Director, Child Hygiene Division, State Board of Health, Indianapolis.

"Economy of Motherhood"—C. O. McCormick, M.D., Associate in Obstetrics, Indiana University School of Medicine, Indianapolis.

"The Red Book"—Wm. F. King, M.D., State Health Commissioner, Indianapolis.

BOOK REVIEWS

CUTANEOUS X-RAY AND RADIUM THERAPY. By Henry H. Hazen, A.M., M.D., Professor of Dermatology, Medical Department of Georgetown University. 166 pages. Illustrated. Cloth. Price $3.00. The C. V. Mosby Company, St. Louis, 1931.

This little book is very practical and attempts to correlate the specialized knowledge of the radiologist and dermatologist. The first thirty-eight pages are devoted to a brief description of x-ray and radium apparatus. Standardization and estimation of dosage are presented in such a manner that a proper comparison of various techniques is easily understood. One of the most valuable features of this book is the chapter describing the action of irradiation on both normal and pathologic tissue. Here he goes into detail, giving us much on histologic pathology of the results of radiation. Sixty-four pages are given to radiation of skin infections, nervous disorders, benign and malignant new growths of the skin in a very critical way. The book is well written, the illustrations are excellent, and should be in the library of everyone interested in the subject.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

ALPHA NAPHTHOL CAMPHOR OIL (Carel).—It contains alpha-naphthol (New and Nonofficial Remedies, 1931, p. 292), 0.5 Gm.; camphor, 0.5 Gm.; cottonseed oil, 12 Gm.; liquid petrolatum to make 100 Gm. Carel Laboratories, Redondo, Calif.

ALPHA-NAPHCO CAMPHOR NASAL UNGUENT.—It contains alpha-naphco (New and Nonofficial Remedies, 1931, p. 293), 2 Gm.; camphor, 2 Gm.; petrolatum to make 100 Gm. Carel Laboratories, Redondo, Calif.

ALPHA-NAPHCO CONES.—Each cone weighs 2.65 Gm. and contains alpha-naphco (New and Nonofficial Remedies, 1931, p. 293), 0.32 Gm., in a base composed of boric acid and sodium bicarbonate, equal parts. Carel Laboratories, Redondo, Calif.

ALPHA-NAPHCO MENTHOL SUPPOSITORIES.—Each suppository weighs 5.2 Gm. and contains alpha-naphco (New and Nonofficial Remedies, 1931, p. 293), 0.356 Gm., and menthol, 0.014 Gm., in a base composed of oil of theobroma and yellow wax. Carel Laboratories, Redondo, Calif.

ALPHA-NAPHCO RECTAL SUPPOSITORIES.—Each suppository weighs 2 Gm. and contains alpha-naphco (New and Nonofficial Remedies, 1931, p. 293), 0.1376 Gm., in a base composed of oil of theobroma and yellow wax. Carel Laboratories, Redondo, Calif.

ALPHA-NAPHCO ZINC STEARATE CAMPHOR OINTMENT.—It contains alpha-naphco (New and Nonofficial Remedies, 1931, p. 293), 7.5 Gm.; camphor, 1.5 Gm.; zinc stearate, 10 Gm.; starch, 10 Gm.; petrolatum to make 100 Gm. Carel Laboratories, Redondo, Calif.

ALPHA-NAPHCO ZINC STEARATE POWDER.—It contains alpha-naphco (New and Nonofficial Remedies, 1931, p. 293), 3.65 Gm.; zinc stearate, 8.75 Gm., talcum to make 100 Gm. Carel Laboratories, Redondo, Calif.—(*Jour. A. M. A.*, July 11, 1931, p. 103.)

LIVER EXTRACT-LEDERLE.—A concentrated, water soluble, nitrogenous, nonprotein fraction obtained from fresh mammalian liver. It is supplied in vials containing an amount of powdered extract representing approximately 100 Gm. of fresh, whole liver. The product is proposed for use in the treatment of pernicious anemia and tropical sprue. Lederle Laboratories, Inc., Pearl River, New York.

RABIES VACCINE (Hixson).—An antirabic vaccine (New and Nonofficial Remedies, 1931, p. 358) prepared according to the general method of David Semple (phenol killed). The product is marketed in packages of seven vials, in packages of fourteen vials and in packages of fourteen syringes.—(*Jour. A. M. A.*, July 18, 1931, p. 179.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

VITAMIN D BOND BREAD (General Baking Co., New York City).—A white bread prepared by the straight dough process containing an added special nutrient vitamin D equivalent to that of three teaspoonfuls of standard cod liver oil for each twenty-four ounces of baked bread (140 vitamin D units as defined by the Council on Pharmacy and Chemistry). This bread is an adequate food source of vitamin D for normal nutrition.

LACTOGEN (Nestle's Milk Products, Inc., New York).—A spray-dried modified cow's milk containing added milk-fat and lactose. The prescribed dilution approximates human milk in percentages of milk-fat, protein, lactose and total minerals and in dispersion of the fat in fine globules. Lactogen is intended for infant feeding.

UFFELMANN'S GOLDEN KRUST BREAD (The Uffelmann Baking Co., Cincinnati).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.—(*Jour. A. M. A.*, July 4, 1931, p. 31.)

PLEZOL BREAD (The Baker Bread Co., Zanesville, Ohio).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

HECHT'S FINE TWINS BREAD (Hecht's Bakery, Bristol, Tenn.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

CARNATION FLAKED WHEAT (Carnation Co., Oconomowoc, Wis., and Seattle, Wash.)—A flaked steam-cooked, white wheat with the coarser bran portion removed. This product is claimed to be a wholesome "hot breakfast cereal" (for home cooking), containing all portions of the wheat berry excepting the outer coarser portion of the bran.—(*Jour. A. M. A.*, July 18, 1931, p. 179.)

DROMEDARY FINEST FLORIDA GRAPEFRUIT (The Hills Brothers Company, Florida).—The canned segments of fully ripened Florida grapefruit packed in sucrose syrup. The grapefruit segments approximate 92.5 percent and the sucrose syrup 7.5 percent of the can contents. It is claimed that this product is as delightful as fresh fruit in flavor and texture and that the nutritional values of the grapefruit are practically unimpaired by the canning, the vitamin C content being only slightly decreased.

SMACO (203) CONCENTRATED LIQUID WHOLE MILK (Sterilized) (S. M. A. Corporation, Cleveland).—A canned evaporated milk. The product is produced exclusively for infant feeding. It is claimed to keep indefinitely in the unopened can.

GRAYSLAKE GELATIN (Grayslake Gelatin Company, Grayslake, Ill.).—An unflavored, unsweetened granular gelatin. It is claimed to be a good quality of food-gelatin prepared from the edible skin of government tested animals; recommended for use in normal and restricted diets and in all food-gelatin preparations.

ZIM'S TWIN LOAF BREAD (Zimmerman's Bakeries, Inc., Hannibal and Mexico, Mo.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

KEW BEE BREAD (Cole's) (Cole Baking Company, Bluefield and Welch, W. Va.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

PRESTO CAKE FLOUR (Self Rising) (Hecker-H-O Company, Inc., Buffalo, N. Y.).—A self-rising flour containing monocalcium acid phosphate, potassium acid tartrate and sodium bicarbonate as leavening agents and salt. It is claimed that Presto Cake Flour contains wholesome baking powder leavening and is especially adapted for cakes, biscuits and pastry baking.

SWAN'S WHOLE MILK BREAD (Swan Brothers, Inc., Knoxville, Tenn.).—A white bread made by the sponge dough method. It is claimed to be a milk bread of good quality.—*(Jour. A. M. A.*, July 25, 1931, p. 248.)

PROPAGANDA FOR REFORM

THE FEDERAL FOOD AND DRUGS ACT: 1906-1931.—A quarter of a century ago, on June 30, 1906, President Theodore Roosevelt signed the Food and Drugs Act specifically designated "for preventing the manufacture, sale, or transportation of adulterated or misbranded or deleterious foods, drugs, medicines and liquors and for regulating traffic therein, and for other purposes". This measure has had a wholesome effect that can scarcely be realized by those not familiar with the conditions of the past. The American Medical Association, through the Council on Pharmacy and Chemistry, has been a pioneer in its efforts to protect the medical profession and the public against fraud, undesirable secrecy and objectionable advertising in connection with proprietary medicinal articles. Its efforts have been greatly facilitated by the passage and enforcement of the Food and Drugs Act. The coming of age of the Food and Drugs Act should not be allowed to pass without some reference to the dominant figure in the crusade for pure foods and drugs, the late Dr. Harvey Washington Wiley. He was chief chemist of the U. S. Department of Agriculture during the period of the fight for the federal act, and until 1912, "a very mountain among men, a lion among fighters". The movement that he helped to start deserves unqualified commendation. The forces on the fighting line deserve congratulation. There is still much to be accomplished. Vigilance must never be relaxed.—*(Jour. A. M. A.*, July 4, 1931, p. 32.)

THEELIN AND THEELOL.—The announcement three years ago of the separation of a potent ovarian hormone from the follicular fluid by Allen and Doisy marked a distinct step in the direction of progress. The product had an estrus-promoting activity that could readily be assayed. Other investigators also have been engaged in the study of ovarian hormones, and medical journals carry accounts of a considerable number of products, each designated by some distinctive trade name. A new era was ushered in when Doisy announced, at the thirteenth International Physiological Congress in 1929, the isolation of a hormone in crystalline form. The Council on Pharmacy and Chemistry of the American Medical Association adopted the name "theelin", selected by Doisy, as the nonproprietary designation to be used in New and Nonofficial Remedies for the ovarian hormone made by the process of Doisy. Last year Doisy and his co-workers recorded the discovery of a second estrogenic substance in the urine of pregnant women. It is a triatomic alcohol for which the name theelol has been proposed. Theelin appears to be approximately twice as active as theelol in adult spayed rats, whereas theelol is six or seven times as active as theelin in immature female rats. It is too early to speculate on the possible uses of these two substances.—*(Jour. A. M. A.*, July 4, 1931, p. 33.)

THE INSOLOID (INSUROL) FRAUD.—For the past year or two, there has been exploited from New York City and Bridgeport, Connecticut, a particularly vicious piece of quackery directed against diabetics. The nostrum involved was known, first, as Insurol and was sold by Officinal Products, Inc., of 276 West 43rd St., New York City. The advertising stated that Insurol Tablets "combined insulin with the actual substance of the pancreas gland" and they were described as "a triumph of Germany's biochemical laboratories". Later, the name of the concern was changed to the Insurol Company of America, Inc. About the time that this change was made, there was also a change in the name of the product from Insurol to Insuloid and the public was told, in effect, that Insuloid was merely a new name for Insurol. The facts were that the products were entirely different. Insurol Tablets were keratin-coated and contained animal tissue (probably derived from the pancreas). They did not contain boldo, jambul, myrtillin, bean-pod tea, or lithium benzoate. Insuloid, on the other hand, was an uncoated tablet and contained all of the products just named except pancreatin. It did not contain insulin. Government experts introduced uncontroverted testimony to show that neither Insurol tablets nor Insuloid tablets would cure diabetes and that neither was a substitute for insulin administered hypodermically. The post office authorities issued a fraud order against the Insurol Company, Inc., H. C. Young, President, Officinal Products, Inc., Otto Probst, Manager, at New York City and Bridgeport, Conn.—*(Jour. A. M. A.*, July 4, 1931, p. 47.)

MEAD'S POWDERED BREWER'S YEAST.—In the announcement of acceptance of Mead's Powdered Brewer's Yeast by the Council on Pharmacy and Chemistry *(Jour. A. M. A.*, May 2, 1931, p. 1477) it was erroneously stated that this product assays approximately 1 vitamin B_2 (G unit) per Gm. It should have read 10 instead of 1. It was also erroneously stated that the unit of vitamin B_1 used for that amount of substance which, added to the diet of rats showing symptoms induced by deficiency of B_1 (F) would give an average weekly gain in weight of 3 Gm. for eight weeks. This should have read 11 to 14 Gm. instead of 3 Gm. Another error was that the product offers not less than 0.98 unit of vitamin B_2(G) per gram. This should have read 10 units instead of 0.98 unit.—*(Jour. A. M. A.*, July 11, 1931, p. 103.)

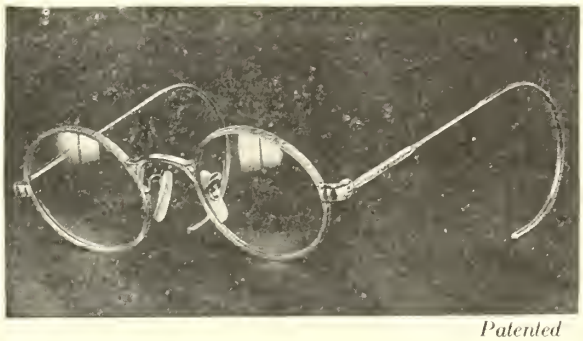
ASTHMOL AND ASTHMOL-EPHEDRINE NOT ACCEPTABLE FOR N. N. R.—Asthmol and Asthmol-Ephedrine are products of Opotherapeutic Laboratory, Sagone & Co., Palermo, Italy, distributed in the United States by the Asthmol Co., New York. Asthmol is a liquid preparation marketed in the form of ampoules. The product is stated to be a combination of pituitary and suprarenal extracts but no definite statement of composition or potency is made. As the name suggests, Asthmol is proposed for the treatment of asthma. Asthmol-Ephedrine (also referred to as "Syrup of Asthmol") is stated to be composed of: "Ephedrine 0.20 Sodium Benzoate, Iodide and bromide, ana 0.25,—Grindelia, 1.75—In 100 cc. of gomenolo-Balsamic syrup. Contains alcohol: 2% by volume." The claims advanced for Asthmol-Ephedrine are typical of those made for complex mixtures—the praise of each constituent is sung without any consideration being given to the question as to whether the several constituents, even if they have the virtues ascribed to them, are indicated at one and the same time and in precisely the amount furnished by the formula. The Council on Pharmacy and Chemistry finds Asthmol and Asthmol-Ephedrine (Dr. Sagone's Syrup of Asthmol) unacceptable for New and Nonofficial Remedies because their composition is unscientific and indefinite, because their names are therapeutically suggestive and not descriptive of compo-

(Continued on adv. p. xx)

JUNIOR



A FRAME *for* REG'LAR YOUNGSTERS



Patented

FOR THE CHILD who "is so hard to keep in glasses", the Junior frame has been designed. Children like it because it's comfortable and good-looking. Parents like it because it will stand more than the usual amount of rough treatment. You'll like it because it answers the question—"How can I keep my child in glasses?".

Examine a Junior frame. Note the braced construction, the rocking pads which fit so comfortably, the handsome engraving — just like on Mother's and Dad's glasses.

When you prescribe glasses for a "reg'lar" youngster, it would be a favor to suggest a Junior frame.

J215

With preparation for school the topic of the day, the right glasses for children is a timely subject.

AO

AMERICAN OPTICAL COMPANY

TRUTH ABOUT MEDICINE

(Continued from page 532)

sition, and because the therapeutic claims made for them are unwarranted.—*(Jour. A. M. A.,* July 11, 1931, p. 103.)

Healthola Diabetic Flour Not Acceptable for N. N. R.—Healthola Diabetic Flour, according to the label on the package, contains protein, 49.73 percent; fat, 24.56 percent; carbohydrates, 15.92 percent, and contains no sugar or starch. According to the advertising of the distributors, Healthola Diabetic Flour Co., Huntington, W. Va., "Healthola is a flour made from an imported vegetable". No statement of the identity of the product is contained on the package or in the advertising nor is there a statement that in the body the protein contained in the product is largely converted into carbohydrate. The Council on Pharmacy and Chemistry finds Healthola Diabetic Flour unacceptable for New and Nonofficial Remedies because its identity is not declared on the label and in the advertising; because its name is not descriptive of the composition but therapeutically suggestive instead, and because the claims are misleading and unwarranted.—*(Jour A. M. A.,* July 11, 1931, p. 103.)

Fayro.—The Federal Trade Commission has issued a Cease and Desist order against the Fayro Laboratories, Inc., which demands that the unwarranted and false claims made in the exploitation of the "obesity cure" Fayro be discontinued. The Commission found that Fayro had essentially the following composition: Epsom salt, 7½ parts; common salt, 1½ parts; Glauber's salts, 1 part, scented with oil of pine needles. The retail price of Fayro was one dollar; the approximate cost of the ingredients was less than three cents. The exploiters of Fayro advertised that when dissolved in a tub containing a quantity of hot water and the body immersed therein, it would dissolve and remove excess fat. Over one and one-half million packages of Fayro have been sold to the gullible and about one-half million dollars spent in advertising this humbug. When the Federal Trade Commission was holding its hearings, the Fayro concern was able to produce two supposedly reputable physicians, Dr. R. C. Falconer and Dr. William C. Olson, to testify in favor of the nostrum.—*(Jour. A. M. A.,* July 11, 1931, p. 122.)

Iron and Copper in the Diet.—There have developed evidences that certain minerals which occur in small quantities in natural foods enter into the nutritive exchanges of the organisms in ways more important than has heretofore been believed. For many years claims of the biologic significance of a number of such elements have been heard. They are almost inevitable contaminants of foods, so that it has been extremely difficult to determine decisively whether zinc, nickel, cobalt, manganese, copper and others are chance constituents of the animal organism, or whether one or more function in some essential process. Recently attention has been focused on one of these elements by the discovery that copper possesses the property of supplementing iron in forming hemoglobin in certain types of experimental anemia. Nutritional anemia can apparently be best corrected in several species by the addition of copper as well as iron to the defective rations. There also is considerable evidence that important functions are performed by manganese. Many analyses of foods concerning the mineral content have become available so that the daily intake of these elements may be judged. Wheat bran, blueberries, whole wheat, split peas, and navy beans are rich in manganese. Calf liver, oysters, beef liver, mushrooms, currants and chocolate are rich in copper. Pork liver, beef liver, spinach, lima beans, calf liver, and navy beans are rich in iron. Vegetables and cereals are the chief contributors of iron. Fruits are an important source of all three elements.—*(Jour. A. M. A.,* July 18, 1931, p. 180.)

Vapex.—Vapex is manufactured by Thomas Kerfoot & Company, Ltd., England, and is distributed in the United States by E. Fougera & Co., Inc., New York. The stuff is sold at a price that seems to be enormously in excess of the cost of its ingredients, which may explain the vast sums that have been spent on persuading the public that the product is a marvel of therapeutic efficiency. Some of the advertising slogans have been: "Vapex Amazed Scientists—Its vapor kills cold germs." "Instant relief for nasal affections with its delightful vapor." An advertisement in *Good Housekeeping* contains the preposterous statement to the effect that "relief from head colds is instantaneous with Vapex." Vapex was examined in the A. M. A. Chemical Laboratory and as a result of this examination the Laboratory concluded that a solution having essentially similar chemical and physical attributes as Vapex may be made as follows: Menthol, 15 Gm.; Oil of Lavender Flowers, 15 cc.; Alcohol, 94 percent, to make 100 cc. It thus appears that this alleged "important medical discovery" is essentially menthol dissolved in alcohol and perfumed with oil of lavender! And it is sold with the implied claim that it will cure nasal infections, give quick relief from catarrh and hay fever, and prevent influenza!—*(Jour. A. M. A.,* July 18, 1931, p. 196.)

ABSTRACTS

INTRAMUSCULAR USE OF LIVER EXTRACT

Maurice B. Strauss, F. H. Laskey Taylor and William B. Castle, Boston *(Journal A. M. A.,* Aug. 1, 1931), present preliminary observations from which it appears that the intramuscular use of liver extract has all the theoretical advantages of the intravenous method and is decidedly practical both from a therapeutic and from an economic standpoint. Furthermore, some patients apparently prefer to inject a small quantity of liver extract intramuscularly rather than to ingest a large quantity of liver or to take an extract by mouth which is not altogether palatable. From the preliminary observations it seems possible that the extract necessary for a week's treatment when taken by mouth may, if given by daily intramuscular injections, suffice for from five to six months. The intramuscular method may be of even greater advantage in those cases requiring unusually large doses of extract by mouth or actually a life-saving measure in severely ill patients. The adequate treatment of cord lesions requiring large amounts of liver extract may be greatly simplified by the parenteral injection of liver extract alone or as an accessory to oral therapy. The authors describe a method of preparing an extract of liver suitable for intramuscular injection and highly potent in permicious anemia. Maximal reticulocyte responses were obtained from the daily intramuscular injection of the extract derived from 10 Gm. of liver. The potential therapeutic and economic advantages of this method are suggested.

UNUSUAL SKIN REACTION TO EPINEPHRINE

According to R. W. Lamson and S. O. Chambers, Los Angeles *(Journal A. M. A.,* Aug. 1, 1931), the subcutaneous administration of epinephrine may be attended with certain protracted or even permanent manifestations. In one patient observed by them so small a dose as 0.2 cc. caused a definite anemia of the skin in an area of at least 3 cm. in diameter. This anemic area was observed more than six hours after the injection, and somewhat larger doses have prolonged such manifestations for a period of from twenty-four to thirty-six hours. In spite of such protracted action with accompanying anemia of the skin, no permanent change was observed. The skin immediately around the site of injection shows marked atrophy suggesting the appearance of the foveated scar which follows a "primary" vaccine virus reaction. These unusual reactions may represent a local hypersensitivity or idiosyncrasy to the drug, but they have not been accompanied by any untoward systemic responses.

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ORIGINAL ARTICLES

PROBLEMS OF THE INDIANA MEDICAL PROFESSION*

A. B. GRAHAM, M.D.

INDIANAPOLIS

I appreciate sincerely the high honor conferred upon me, and every endeavor has been made to substantiate the confidence placed in my ability to serve the Indiana State Medical Association as its highest officer. I am especially grateful to the other officers and the various committees of this Association for their aid and cordial cooperation, and for the harmony that has prevailed at all times between them and your president. They have been ever faithful in their efforts to perform well and conscientiously the tasks to which they were assigned.

The present status of the Indiana State Medical Association is excellent and most encouraging. Its work and accomplishments have at all times compared very favorably with those of any similar organization. However, the future maintenance of its present, rather secure position demands an increased activity on the part of all its members. This Association is only so strong and powerful as its component county medical societies. Its solidity and firmness of foundation is dependent entirely upon the concerted activity of these component medical units. I would, therefore, suggest an increased concerted activity of the eighty-two county medical societies that constitute the Indiana State Medical Association. I would also suggest that these societies develop programs designed to carry out the fundamental purposes of medical organization. They should assume the burden and responsibilities which is theirs in the promotion of scientific medicine, and in combating these influences or menaces that tend to retard medical progress. Concerted activity of the county medical societies is imperative for the efficient and satisfactory solution of the various medical problems that are ever confronting the medical profession.

A large portion of the important work transacted by the House of Delegates, the legislative body of this Association, is the result of the earnest and sincere efforts of a very small minority of its members. These members are well informed on all medical problems—they are frankly interested in medical progress—they are ever alert and up and doing things from which this Association reaps the reward. Their ceaseless and untiring efforts are deserving of our respect and heartiest commendation. The Indiana State Medical Association has become somewhat dependent upon the efforts of this small group of its members—the so-called old guard—and yet past experiences have demonstrated that they have never been found wanting or absent in any threatening medical crisis. Furthermore, the members of this Associaton may be assured that, so long as men of this type are able to serve the medical profession, they will always be found at or near the firing line, and as representatives of the Indiana State Medical Association they will always be at the service of the people of Indiana.

Every county society has some members that are really interested in the problems of the medical profession. If every county medical society had such a representative in the House of Delegates of the Indiana State Medical Association, he would prove a most valuable asset not only to his own society but likewise to the medical profession of his state. With the House of Delegates of this Association comprising such a representative group of members, it is quite possible that concerted and decisive action on any medical problem would prove easy of attainment. Further, it would enable this Association to dispose of its problems more expeditiously and more satisfactorily.

Every county medical society in Indiana should be encouraged to conduct at least one annual public meeting. It should be the purpose of this public meeting to inform the laity that the medical profession is essentially interested in the health and welfare of the people of Indiana. This Association and its component county medical units should cooperate with all state organizations that are interested in the promotion of public health service. Notwithstanding the fact that some of these organizations are composed of and governed by laymen, the cordial cooperation of the medical

*Presidential address presented at the Indianapolis session of the Indiana State Medical Association, September, 1931.

profession with them would aid very markedly in an intelligent performance of their work. This Association's Committee on Publicity has been incessant in its efforts for the promotion of a better understanding between the medical profession and the laity. Public opinion is dependent on educational publicity. Therefore, all educational publicity regarding public health problems should have the approbation of the medical profession. This Association and its component county medical units should exert every effort in an endeavor to create a public opinion that is favorable to scientific medicine. The establishment of a closer and more confident relationship between the medical profession and the laity is very desirable. The attainment of this desired relationship must of necessity demand the sincere cooperation of every member of the Indiana State Medical Association.

This year conflicting dates made it impossible for your president to attend all the annual meetings of the district medical societies. As many as three were held in one day, and one was held on the same date as that of the annual secretaries' conference. Although it may not be deemed necessary that your president attend these meetings, it is my personal opinion that he should do so. Your secretary should be present at all of them. He is the one representative of the Indiana State Medical Association who should and can most ably and intelligently inform, in every detail, its members as to the present status of their Association. He could and would furnish reliable data regarding all medical problems that demand solution, and he would outline clearly and definitely the future work and possible accomplishments of this Association. This seemingly trivial problem of conflicting dates in the meetings of the district medical societies should be adjusted or remedied, and by so doing it will imply a much better perfected state medical organization. The better and more perfected the county, district and state organizations, the easier and more stable will be future medical progress.

Some physician voiced the opinion that "there is no better agent for spreading the truth in health matters, as the doctor sees it, than the doctor's own family". If such be true, we should regard with much pride the Woman's Auxiliary to our State Medical Association. I regret, however, my inability to advise intelligently the officers of the Auxiliary as how best to direct their efforts for the accomplishment of the greatest good and best results. It is, I believe, very essential that the medical auxiliaries have the direct cooperation of the county, district and state medical societies. Its members should, in some way, be kept informed on the present day medical problems and threatening menaces. They should be supplied with competent speakers who can and will discuss problems of interest to them. In the solution of some of these problems the cooperation and aid of the Woman's Auxiliary may prove very valuable, and especially so in combating the spread of cultism and quackery. Concerted activity of the county auxiliaries, as I have suggested for the county medical societies, and the cooperation of the combined strength of these organizations, will secure the much-desired results.

The medical profession of Indiana has valid reasons for manifesting pride in the Indiana University School of Medicine. Those of us having practiced medicine for thirty or more years have witnessed a remarkable transformation in the character and teaching methods of the medical schools in this country. The numerous poorly endowed and poorly equipped medical schools of former years—schools in which the clinical teaching was carried on by practitioners—have been replaced by liberally endowed schools in which the fundamental sciences are taught entirely by full-time or professional teachers. In some schools this full-time teaching has been extended to the clinical branches. As the result of endowments which provide for full-time teachers with well-equipped laboratories and hospitals at their command, medical teaching has advanced rapidly. The Indiana University School of Medicine compares most favorably with any Class A medical school in this country. The advisability of continuing the practitioner in medical teaching has received much discussion pro and con. It is my personal opinion that there is a place for the practitioner as a teacher in our medical schools, and that he can be used with advantage to both the school and its students. It has been very aptly and truthfully stated that "he approaches the patient from the practitioner standpoint, and the full-time professor approaches the patient with an enormous interest in the disease". It is quite possible that, in the near future, the entire training of medical students will be given by full-time professors and instructors. This may be a rational policy on the part of the medical schools, and yet I regard it as exceedingly fortunate that the students in the Indiana University School of Medicine receive their training from both full-time professors and practitioners.

Resident students of Indiana, applying for entrance to the Indiana University School of Medicine, provided they comply with its entrance requirements for admission, should be given preference over applicants that reside in other states. This opinion is shared by many members of the Indiana State Medical Association. Even though an applicant from another state should present credentials that indicate a somewhat higher intellectual attainment —even though said applicant may rate higher in his adaptability tests—the qualified Indiana applicant should be given the preference by this school of medicine. Especially I would suggest that the Indiana University School of Medicine give preference to any qualified applicant who is the son or daughter of an Indiana physician. For thirty years it has been my privilege to have

played a somewhat minor role in medical teaching in the state of Indiana. I have the highest admiration for our state school of medicine and its remarkable achievements, and I am most sincere in the viewpoint that preference should be given to the qualified Indiana applicant for admission to the Indiana University School of Medicine. The amicable solution of this problem can be attained by the hearty cooperation of this Association with our state school of medicine. Such a cooperation would prove an invaluable asset to both organizations.

The suggestion was made by your president and indorsed by your Council that the Scientific Program for this annual session comprise general sessions only, and that the entire program be presented by members of this Association. This somewhat radical change in policy over that of former years has not escaped criticism and unfavorable comment. Your Committee on Scientific Program has exerted the utmost care and diligence in the selection of the essayists and discussants that will participate in this annual scientific program. I am confident that the scientific papers and discussions presented will have the approval of the majority of the members of this Association. Shall the future scientific programs of the Indiana State Medical Association be presented exclusively by Indiana medical talent—shall they be presented by distinguished physicians and surgeons from other states—or shall they comprise Indiana talent supplemented by talent from other states? This much-discussed and debated problem can only be solved satisfactorily by securing expressions of opinion from the majority of the members of this Association. The future programs that are presented should of necessity interest and meet with the approval of the majority of our members. I may be in error—however that may be—I should favor, if possible, all future scientific programs of this State Medical Association being presented exclusively by its own members. I should like to see our future scientific programs reflect the highest ideals, the work and aspirations of our members. Unfortunately, the state of Indiana, as a contributor to medical and surgical literature, has a very low rating, and some of the programs of this Association in recent years have not added any encouragement for marked improvement. I have every faith in the ability of the members of this Association to prepare and present scientific programs that will prove educational and receive general approval. This important problem should not be solved by a committee. It should be the earnest endeavor of the Indiana State Medical Association to gratify the wishes and desires of the majority of its members. Therefore, I would suggest that all members of this Association give this important problem the serious consideration to which it is entitled.

The advisability of giving medical and surgical post-graduate courses in the state of Indiana has received much favorable comment, and there is an apparent increasing demand for the same. Two committees appointed to study this question will have some interesting and valuable data for presentation during this annual session. The question will very naturally arise as to whether these post-graduate courses shall be presented by members of this Association or by distinguished clinicians from other states. If the latter plan be adopted, this Association will have to provide a budget for the maintenance of the same. Personally, I advocate post-graduate courses in medicine and surgery in this state. As to how, when and where these courses shall be presented I leave that solely to the better judgment of the committees who have given this problem the necessary study and investigation.

The medical profession is always interested in any problem that pertains to the care of sick people. Therefore, I wish to present a brief summary of the report made by a committee on the grading of nursing schools:

"1. The supply of active graduate nurses in the United States is increasing far more rapidly than the general population.

"2. There is a serious unemployment among nurses. This unemployment grows worse yearly.

"3. There is a shortage of nurses in some fields. Geographic distribution is uneven. Nurses tend to live in cities and avoid the country. They are apt to be found near good hospitals and not apt to be found in regions where hospital facilities are lacking.

"4. There is a scarcity of nurses properly prepared for nursing in certain specialties, as mental, heart, contagious, obstetrics, etc.

"5. There is a shortage of nurses who have had systematic preparation for executive and teaching positions.

"6. Earnings of nurses are low. In private duty there is practically no opportunity for professional advancement or increased pay.

"7. Physicians want intelligent nurses. They prefer graduate nurses. They prefer well-trained nurses.

8. Educational standards in nursing are rising, but educational standards in the community are rising much more rapidly. If nursing is to attract women of the so-called professional type, it must set its educational standards high enough so that it can compete for students with other professions now open to women."

This interesting report reveals the fact that today there is more than one graduate nurse in practice to every six hundred people. So long as hospitals prefer student service to the more costly graduate service, and so long as they continue to have annually thirty thousand or more new graduates, the majority of whom must try to earn a livelihood in an already over-crowded field of private nursing, it is quite evident as to the trials and hardships that will confront the future graduate nurse. Those experienced in this field of work are of the opinion that the only plausible solution

of this problem is to have a higher educational standard for nursing. Further, they favor a discontinuance of a large portion of the student service and the increasing of the graduate service in hospitals. A marked increase of the graduate nurse service in hospitals, while more costly, would add very perceptibly to the comfort and welfare of the patients. The present status of the graduate nurse is deplorable, a fact that should be recognized by every member of the Indiana State Medical Association. This Association should cooperate with both the hospitals and Association of Nurses in the State of Indiana, and it should aid them, in every way possible, in finding a satisfactory solution of the present-day distressing graduate nurse problem.

The ever-increasing fear that some members of the medical profession have of the possible advent of state medicine and other threatening menaces is very evident. That there is possibly some justification for this manifested fear cannot be denied. It is, however, my personal opinion that our fate will not be that of state medicine. In the past the medical profession has combatted successfully menaces that appeared equally as large and threatening as those of today. If state medicine should overtake the medical profession we can only censure ourselves and we must assume the entire responsibility for such a medical calamity. Failure to solve the threatening medical menaces of today can only occur as the result of inadequacy of the medical profession. There has been and continues to be too much talk about state medicine and other supposedly threatening menaces. "It is coming" is a proclamation that is doing more damage than good. Such proclamations only tend to aid their advent. If the medical profession does not assist these menaces they will not and cannot come.

The present-day widespread economic depression has, very unfortunately, taken its toll in the medical profession, the same as it has in other professions, industries, and walks of life. It is, therefore, quite natural that some of our members should become pessimistic and forecast a dire, dismal and uninteresting future for the medical profession. However, these members with their pessimistic prognostications should not overlook the fact that times are changing. In recent years the general public, civic organizations and even industry have become frankly interested in the advancement of public health service. The laity is demanding an increased and better public health service, and their demand is supported generously by public opinion. This increasing tide of public sentiment as regards public health service must, of necessity, demand the sincerest consideration and most cordial cooperation of the medical profession. All non-medical or civic organizations whose goal is the advancement of public health service should have the expert guidance of the medical profession. A new situation confronts the medical profession of today. The laity and its evident, ever-increasing participation in public health problems is receiving most generous public support. It matters not as to whether we regard it as just or unjust, public opinion is demanding a better public health service. As the result of this increased activity in health problems by the laity, state medicine has made not a little progress in recent years. If the medical profession is to combat successfully state medicine and other threatening menaces, it must make an honest appraisal of its own work. It must determine rather accurately, as to whether it is meeting successfully all the obligations of public service. If it can be proved definitely that the medical profession has failed to meet its public service obligations, and fails in the future to amend this error, the end result will be that these obligations will be met by some other agency or organization. The medical profession, therefore, must and should adjust its relationship to the new or modern social condition. It should cooperate cordially with all recognized civic organizations that are sincerely interested in public health problems. Such an adjustment and cooperation on its part would, I believe, dispel all fear of the advent of state medicine. Further, the medical profession would continue to occupy the position to which it has always aspired and maintained—and the position that the laity wishes and expects it to occupy. It is plainly evident that the medical profession at the present time is retreating slowly in its fear of the threatening medical menaces. Therefore, instead of continuing to combat public opinion and retreat slowly, the medical profession should appraise its own work, and if necessary adjust and amend it carefully in order that the solution of all public health problems may have the approval of both our profession and the laity. The earnest desire on the part of the medical profession to lead and guide expertly in the solution of all public health problems can and will be maintained by self adjustment and cordial cooperation with civic organizations interested in these problems. I am very confident that our profession is equal to this task. Failure will imply a deficient organization and cooperation, and very poor generalship on the part of the medical profession.

Instead of pessimism, let optimism pervade our ranks. Instead of a continuous combating the so-called medical menaces, instead of proclaiming from the house tops that state medicine is coming, we should make a sincere and conscientious self appraisal of our own work, and we should cooperate intelligently and cordially with all civic organizations that are sincere in their endeavors to attain a better public health service. The pursuance of such a future policy will enable the medical profession to maintain the lofty position that it has always occupied and enjoyed, and the various civic organizations will not only gladly and willingly cooperate but operate under the expert guidance of the medical profession.

As I have previously stated the medical menaces of former years were solved successfully. The successful combating of the present-day and future medical menaces is dependent wholly upon the activity, organization and sagacity of the medical profession, and its intelligent and cordial cooperation with all civic organizations and state agencies interested in public health problems and supported strongly by public opinion.

THE LATERAL PYELOGRAM*

(A NEGLECTED PROCEDURE IN THE DIAGNOSIS OF VARIOUS ABDOMINAL CONDITIONS)

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Reference in the literature to the radiographic examination of the kidney and upper ureter with the patient in the lateral position has been limited most to its value in the differential diagnosis of urinary and biliary calculi, with but an occasional notation of its employment in other obscure abdominal conditions. Insofar as I know there has been no serious effort made to determine its value in the various kidney and abdominal lesions which have an element of uncertainty remaining after completion of the usual urological examination.

In 1913 I attempted to demonstrate, by means of the lateral pyelogram, the outline of the anterior and the posterior face of the kidney pelvis in small hydronephroses, that I might compare the degree of bulging of each, thinking that the absence of pedicle structures behind the pelvis might permit a relatively greater bulging of the posterior surface sufficient to be of value in an early diagnosis. I could not, at that time, secure a lateral pyelogram sufficiently clear for such interpretation. I made no further attempt until 1918, when I found with the improved radiographic equipment available it was perfectly feasible and practical, since which time it has been employed in our efforts to diagnose various obscure abdominal conditions. In the course of this study there were times when, with our limited knowledge of the normal variations of the lateral pyelogram, it was found of no help to us, or through faulty reading of the film, a wrong diagnosis was made. Therefore, the data herein submitted are intended but to indicate some of its possibilities in aiding the diagnosis of certain obscure abdominal and kidney lesions, and any conclusions drawn cannot be accepted as final because of the limited amount of material available.

The technic of making a lateral pyelogram should be studied and worked out by each cystoscopist and roentgenologist. It will vary necessarily somewhat with each operator. With us it may be summarized as follows:

1. The usual x-ray cystoscopic table is used. Even in marked mobility of the kidney, the patient's lying upon the side does not necessarily dislodge the kidney anteriorly, and changing the position upon the table does not work a hardship on the patient. Previous teaching that a specially designed table was necessary for the making of a satisfactory lateral radiogram of the renal area has retarded the development of lateral pyelography and discouraged its more general employment.

2. The side of the patient to be injected lies next to the film. No leaded catheter should be in the opposite ureter at the time of the exposure.

3. The position must be an exact lateral. On a film with the patient in such a position the outline of the vertebral spinous process will be pointing directly backward and that of the transverse process cannot be determined definitely. The crest of the ilium is the bony landmark in determining the vertical position of the patient on the table.

4. The exposure necessary in the lateral position is longer in duration than in the antero-posterior position. While in a small patient the breath may be held sufficiently long to secure a satisfactory picture, when the patient is larger and occasion demands a longer exposure the patient may be instructed to continue taking very superficial breaths while the picture is being made. This method has proved more satisfactory than when two exposures are made allowing the patient to breathe between them.

5. An antero-posterior pyelogram is first made. The renal pelvis is then emptied, and the film is developed and studied. If a lateral pyelogram is decided upon, the patient's position on the table is changed and the pelvis is reinjected. The two injections at the one sitting are practical and can be accomplished without increased discomfort to the patient.

A satisfactory lateral pyelogram should permit the study of the following:

1. The vertical position of the kidney.
2. The degree of rotation of the kidney, whether upon its long axis or its transverse axis. The former we designate as its horizontal or oblique rotation; the latter as its vertical rotation.
3. The antero-posterior position of the kidney.
4. The outline of the pelvis as visualized in the lateral position.
5. The uretero-pelvic junction cannot as a rule be shown with sufficient detail in the normally placed kidney to be of much value. However, in the displaced kidney the direction of the upper ureter as it enters the pelvis is important and its course should show distinctly on the film.

In the lateral pyelogram the normally placed pelvis lies behind the second lumbar vertebra, the shadow of the vertebra superimposing that of the

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pelvis. Its long axis corresponds to that of the spine. The pelvis proper may have an elongated, oval shape with the superior and inferior calyx extending from above and below, respectively, as trumpet shaped shadows, or calices directed anteriorly and posteriorly may be visualized in the pelvis with unusually long calices, or when horizontal rotation of the kidney is present. In many of the cases studied in which no renal pathology was determined there existed a varying degree of horizontal rotation, the calices pointing backward toward the spinous processes of the vertebræ. What constitutes the pathological in relation to horizontal rotation we cannot at present state. However, when such rotation co-exists with displacement of the organ, it assumes a diagnostic importance. Any vertical rotation, whether due to elevation of the lower pole or depression of the upper pole, is an evidence of pathology, as is also any appreciable degree of displacement of the kidney anteriorly. The upper ureter in the normal case passes downward with a slightly convex curve anteriorly. Its shadow lies behind the shadow of the lower border of the second, part or all of the third, and at times a part of the fourth, becoming then anterior at the body of the fourth lumbar vertebra. It is then lost in the shadow of the iliac bone.

We have not found the lateral pyelogram of sufficient added diagnostic value in renal infections nor renal stasis to encourage us in its employment in these diseases. Also, it is usually of but corroborative value and is not of especial worth in solving the problems of the movable kidney, and it is therefore seldom necessary in this condition. However, in the presence of an abdominal tumor, the relation a movable kidney bears to the tumor mass may have to be known and occasionally this can be more accurately shown by the lateral pyelogram, when an understanding of the findings of a movable kidney, as pyelographed in the lateral position, will be necessary. There will be a varying degree of downward displacement of the pyelogram, the shadow of the pelvis resting behind the third or fourth lumbar vertebra. Almost always there is some horizontal rotation, the calices pointing backward. Though vertical rotation may occur in a small degree it is an infrequent finding, and when it is marked factors other than merely mobility should be suspected. Even in marked prolapse of the kidney anterior displacement of the pyelogram is slight. The shadow of the uretero-pelvic union is behind that of the vertebra, while the shadow of the upper ureter may lie farther forward than in the normally placed kidney.

The lateral pyelogram is of value in diagnosing congenital changes in the kidney and the ureter. I have not found it of aid in identifying the caudal pelves of the double kidney in the completely doubled ureter when but this one pelvis is injected, and a study of the antero-posterior pyelogram, as I have indicated elsewhere[1], will help most in diagnosing this condition. In the bifid ureter the anomaly often will be demonstrable only by the lateral pyelogram. The point of fusion thus can be definitely located, the degree of separation of the two branches of the ureters and pelves shown, and the exact antero-posterior relation of these organs visualized on the film. In the double kidney the pelves lie behind the vertebra and there is some horizontal rotation. The shadow of the ureters is behind the vertebræ as in the normally placed kidney. Visualization of the two ureters in this manner would also enable exact localization of a stone shadow in either branch.

In the abdominal congenitally dystopic kidney, with the anteriorly placed pelvis, there will be horizontal rotation, the calices pointing posteriorly, while the long axis of the kidney still corresponds to that of the spine. Although there may be far lateral displacement of the kidney, as shown on the antero-posterior pyelogram, it still lies behind or very close to the shadow of the vertebræ on the lateral film, and the ureter follows a course correspondingly close to the spine. These findings are in contrast to those in the horseshoe kidney. Here the shadow of one pelvis and ureter lies anterior to those of the vertebræ, and there is marked horizontal rotation of the pelvis. While in the symmetrical horseshoe kidney this anterior displacement might not obtain, in the cases I have studied it has been a constant finding. Also, in horseshoe kidney, there has been some horizontal rotation of the second pelvis which will have little if any anterior displacement. In the horseshoe kidney the shadow of the ureter of one kidney tends to follow a course more anteriorly than it does in congenital abdominal dystopia. In pelvic dystopia the pelvis and the ureter lie far anteriorly to the shadow of the sacrum. There is always horizontal rotation. I have had opportunity to study the pelves by lateral pyelography in two cases of bilateral pelvic dystopia and in neither did it seem to aid in determining whether the two kidneys were fused or not, which is the greatest problem in this type of anomaly unsolved, and gives to it still a diagnostic interest.

In differentiating lesions of the various organs in the upper abdomen by the lateral film much has been written, the discussions being limited almost wholly to it as an aid in distinguishing between calculi of the kidney and gall-stones. Sir Thompson-Walker[2] gives an excellent summary of our knowledge concerning the value of the lateral radiogram in these diseases. In the normally placed kidney a stone in its pelvis will cast a shadow behind the second lumbar vertebra, unless the kidney be very large—a calculous pyonephrosis—when it might lie anterior to the spine, and its exact nature can be determined only by a lateral pyelogram. A gall-stone shadow will usually be anterior to the shadow of the spine, lying out in the abdominal area, and it tends to have a lower position, being opposite the third or fourth lumbar vertebra. If the stone is located

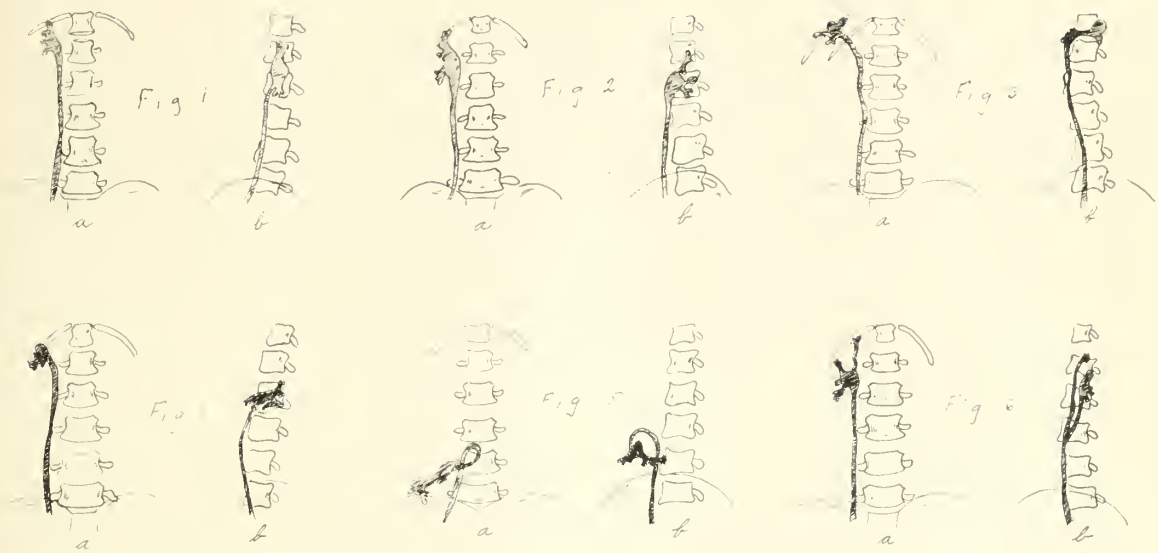


Figure 1. Antero-posterior, a, and lateral, b, pyelograms of a normal kidney. In b, the shadow of the pelvis is parallel with that of the spine.

Figure 2. The lateral pyelogram, b, shows a horizontal rotation of the kidney, the calices pointing directly backward. There was present a large angioma of the liver.

Figure 3. The lateral pyelogram, b, in this instance of hypernephroma shows a vertical rotation of the kidney the long axis of the pelvis being at right angles to the spine. There is no anterior displacement of the kidney.

Figure 4. The solitary cyst in this kidney has resulted in a vertical rotation of the kidney, b, but with no anterior displacement of the organ. The relation of the origin of the cyst to the pelvis is shown in the lateral pyelogram.

Figure 5. In this case of post-peritoneal sarcoma there is marked downward displacement of the kidney, a, while the lateral pyelogram, b, shows vertical rotation with marked anterior displacement of the kidney.

Figure 6. Visualization of the two branches of this instance of bifid ureter is made possible only by employing the lateral pyelogram, b.

in the cystic or common duct its shadow will be near or even behind that of the vertebra. The shadow of a calcified lymphatic gland will be closer to the spine than will that of a stone in the gall-bladder, but it will still be anterior to the vertebra and at a lower position than the shadow of a renal stone, lying opposite the third or fourth lumbar vertebra. If doubt remains as to its exact location, a lateral pyelogram will at once indicate its relation to the urinary tract.

The identity of a tumor mass in the upper abdomen is difficult to determine, and its exact location and its relation to the kidney may be so obscure as to be often solved by surgical exploration only. Special diagnostic procedures have been proposed and employed in the hope that a clinical differential diagnosis might thus be made more certain[3]. An accumulation of clinical material by different observers over a long period of time has proved their exact worth, and they have gained or lost favor accordingly. While we have not had sufficient opportunity to study the lateral pyelogram in this connection to justify a definite statement, yet it would seem that this procedure, without adding to the difficulties of the operator or increasing the hazard to the patient, is of distinct value in solving such a problem in certain obscure cases.

A tumor mass of the gall-bladder or of the liver, when it extends posteriorly, may influence the antero-posterior and lateral pyelogram by pressure exerted upon the outer border of the kidney. This may be sufficient to distort the antero-posterior pyelogram, giving an anteriorly placed pelvis, when the lateral pyelogram will show marked horizontal rotation. There is very little if any vertical displacement and no vertical rotation of the kidney, the pelvic shadow lying behind that of the second lumbar vertebra, its long axis parallel to that of the spine. The profile of the pelvis and calices as visualized on the lateral film is that of a normal pelvis. The ureteral shadows follow the normal course. In our experience it has been true that in intra-abdominal tumors vertical displacement or vertical rotation of the kidney is infrequent, nor has there been appreciable change in the course of the ureter from the normal.

In post-peritoneal tumors there may be no displacement of the kidney as was indicated in an autopsy specimen of a post-peritoneal sarcoma in which case the ureter was occluded by the growth, whether due to pressure upon or extension of the growth into the ureter was not definitely known, and pyelography was impossible. However, there may be, and often is, a marked downward and anterior displacement of the kidney, with both horizontal and vertical rotation of the kidney, the pelvis lying as low as the crest of the ilium. On the antero-posterior film the pelvis may or may not be forced medianward, but the lateral film shows it to be far forward, away from the shadows of the vertebræ. The anterior course of the ureter as it passes forward to the pelvis is shown. The horizontal rotation may be complete, however, because of the vertical rotation the calices will often be directed downward toward the crest of the ilium. The profile of the pelvis and calices is normal or almost so. These findings are in marked contrast to those observed in tumors of the kidney itself. Here the

pelvic shadow tends to be forced upward, resting behind the shadow of the twelfth dorsal or the first lumbar vertebra. There is very little, if any, anterior displacement of the kidney. Horizontal rotation is always present in varying degrees and vertical rotation is so great that at times the long axis of the pelvic shadow is at right angles to the spine. In such instances if the horizontal rotation be sufficient the calices will be directed downward, it being the upper pole of the kidney which is directed posteriorly toward the spinous processes of the vertebræ. The vertical rotation causes the pelvic shadow as shown on the antero-posterior pyelogram to appear almost completely destroyed, when if a lateral pyelogram is taken, a pelvic shadow with a surprisingly good outline is shown. In the interpretation of the profile of the pelvis as visualized on the lateral film, often pressure deformity of a single calyx or group of calices as made by the tumor will be evident, thus aiding in diagnosing the portion of the kidney involved.

In conclusion:

1. Lateral pyelography is practical, and can be easily performed on the ordinary x-ray cystoscopic table without added risk to the patient.
2. The exact technic will vary with different operators, but the renal pelvis and abdominal ureter can be visualized satisfactorily in the majority of cases.
3. The study of the lateral pyelogram includes the vertical and anterior position of the kidney, its degree of horizontal or vertical rotation, and the profile of the pelvis as it corresponds to that of the antero-posterior pyelogram.
4. Many problems of the congenitally malformed kidney can be solved more completely by the lateral pyelogram than by the usual urological diagnostic methods.
5. It is an aid in the differential diagnosis of calculi of the gall-bladder and of the kidney.
6. With the data available it seems to have an especial value in the differential diagnosis of the abdominal tumor of uncertain origin and nature.

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DISCUSSION

GEORGE KIMBALL, M.D. (Laporte): Those of us who have been in the habit of making, or attempting to make, diagnoses of kidney lesions, or of conditions that might be confused with kidney lesions, have at times met with difficulties that seemed almost insurmountable. I am sure you will agree that any procedure which will lessen the chances for error and make for the comfort of the patient as well as the diagnostician will be welcome. I am sure that many of us feel when we make a pyelogram and a genito-urinary examination it is our duty to find something wrong—it may be pathology, or a foreign body. However, it seems to me that the essayist has brought out in this connection that there is another angle to the urological examination after the finding of urinary pathology, namely, the finding of a normal kidney, and the ability to decide what overlapping of the surrounding organs might be pathological and produce a given train of symptoms.

Sometimes the diagnosis is easy, but many times we come in contact with a case where some little point in the history, in the urinalysis, some little difficulty with the pyelogram, causes us to feel not quite sure of our ground, and we cannot make a positive diagnosis to our satisfaction. In my experience those needed data have been sometimes supplied by this procedure which the essayist has shown us this afternoon. Therefore, I feel it is worth consideration, and if properly used in selected cases will prove of great help and satisfaction. The chief thing which commends this procedure to me is the fact that it can be done so easily and with so little distress or discomfort to the patient.

It seems to me that the high spots in the interpretation of the lateral pyelogram were brought out by the essayist when he pointed out that horizontal or vertical rotation of the kidney will tell the story. If these two points are borne in mind with reference to the lateral pyelogram, many of the pitfalls of diagnosis will be avoided.

I have found from my limited experience that one must be sure he is making a lateral pyelogram. In other words, be sure the patient is squarely on his side. You can check it up when the picture is made by looking at the shadow of the spine, but be sure before that and you will avoid trouble.

The point I want to make is that if you cannot say what is wrong with the kidney, try at least to say that nothing is wrong. If you can do that you will be helping the patient, you will be helping the surgeon in arriving at a diagnosis, which appears to be just as scientific as diagnosis of tumor of the kidney, stones in the pelvis, or something of that sort.

A. J. SPARKS, M.D. (Fort Wayne): Dr. Mertz always has an important message and he did not disappoint us this time. This method of examination has been used at various times, in a slipshod manner, but has never been done as systematically and brought to us as clearly as he has brought it to us this afternoon.

Dr. Mertz has confined his study to cases where a tumor mass was present in the abdomen, but the

same studies may be applied to cases where there is no definite mass; where the symptoms are not at all diagnostic; and where there is some question whether the pathological condition is in the abdomen or in the urinary tract.

This paper deals with lateral pyelography, but a lot of information is to be gained from pyelography with the patient in the upright position, and we have made it a routine in cases where the findings are not positive. The lateral position gives us, in addition, the relation of the kidney pelvis and ureter to other shadows or tumors which may be present, as well as deformities in the pelvis itself which, as was pointed out, we will know more about as these studies are continued.

The point I wish to emphasize is the necessity for studying the urinary tract in many cases which at first glance appear to have all the symptoms centered in the abdominal viscera. The results of such studies are oftentimes surprising, as has been proven over and over again. That these studies are not made is due to the belief that cystoscopy and pyelography are very hazardous procedures. As a matter of fact that is not true at all when properly carried out and it should be used more often than at present as a means of differential diagnosis in obscure abdominal conditions.

P. E. McCown, M.D., (Indianapolis): As we approach urology and see the beautiful outlay we have for diagnosis one would think the armamentarium was perfect, and I think perhaps it is so regarded now by the general man. However, urologists know that the antero-posterior pyelogram does not give us all the information we need; therefore, the lateral pyelogram has helped tremendously by telling us why we do not have perfectly clear calyces, why they appear in such a way that we feel we are dealing with tumor or cyst. I shall not attempt to illustrate with cases, because Dr. Mertz has done that very well, but to reiterate, this is a method that has helped us in clearing up doubtful points over which we have been stumbling for quite a number of years.

Another thing which has given me considerable satisfaction in dealing with obscure cases, improving the positiveness of diagnosis, is pyeloscopy. It is a new method with which none of us in this country have had large experience yet. Pyeloscopy is filling the kidney pelvis under the fluoroscope and studying it the same as we do the gastro-intestinal tract. I first saw this work done in Paris in Professor Legueu's Necker Hospital clinic, and it has been taken up in this country by a number of men who are carefully studying it. It not only shows the shape of the kidney pelvis, but by measuring the emptying time required to rid the kidney pelvis of the opaque media, we are able to estimate the dynamic motor expulsive effort of the case and compare it with the normal rate. Legueu and his associates regard this rate as one cubic centimeter per minute; for example, a normal kidney pelvis with a capacity of seven to ten cubic centimeters should empty itself in seven to ten minutes approximately.

By this method, differentiation between dilatation and retention is easily made, as illustrated by the fact that some kidneys showing dilated pelves, calyces and ureters by pyelogram have a good emptying time with little or no retention, while we occasionally find a normal sized kidney pelvis with little or no expulsive power and with retention far beyond the normal. This study has proved of great help to me in unusual cases after routine examinations have been made. Furthermore, by pressing on the abdomen and flank the degree of movability and frequently that of rotation, especially on the horizontal axis, can be established. Movable masses, if attached to the kidney, or the kidney themselves will move with the pelvis, this being helpful in differential abdominal diagnosis.

Therefore, with lateral pyelograms and the still newer method of pyeloscopy we have advanced considerably in our ability to diagnose abnormal kidney positions; in our knowledge concerning kidney physiology, especially the relationship of dilatation and retention; also to give greater assistance in difficult abdominal diagnosis.

H. O. Mertz (closing): I thank the men for their generous discussion. I have very little to add in emphasizing the value of the lateral pyelogram. I feel that every one of us who have been doing this type of work should take into cognizance the value and the limitations of such a procedure, and if we do that I think it will be helpful to us. I do not think it overlaps at all pyeloscopy which Dr. McCown has mentioned. It is a separate and distinct thing working on a separate and distinct problem. Pyeloscopy is to detect dilatation or retention; it is to show retention, inability to empty, interference with physiological function; that is its field. My first statement was that the lateral pyelogram, as we have found it, was of no value in static conditions of the kidney, or just where pyeloscopy is of most value. I think it is timely to present the matter of pyeloscopy. You will hear more and more about it, but its virtue at the present time is the detection of retention, and the visualization of interference with physiological drainage of the kidney, and not the kidney's relationship to other abdominal viscera, the field in which I hope the lateral pyelogram will prove of value to you.

THE ACUTE ABDOMEN*

D. P. Hall, M.D.
LOUISVILLE, KENTUCKY

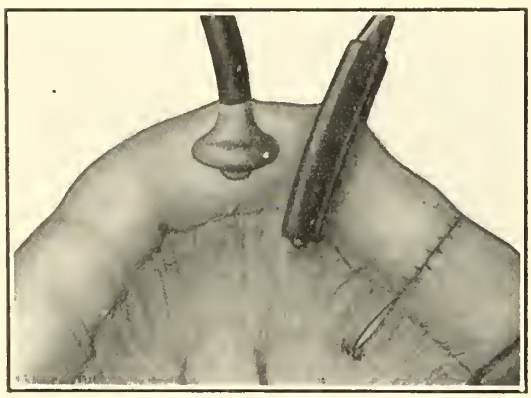
Pathological conditions of an acute type arising in the abdomen and necessitating surgical intervention are invariably accompanied by pain. Acute abdominal pain was the essential symptom

*Presented before the Ninth District Medical Association, at Lebanon.

which stimulated your own Dr. John S. Bobbs to perform the first cholecystostomy, and was the impelling motive of Dr. Ephraim McDowell, of Kentucky, to accomplish successfully the first abdominal section.

Acute pathological affections of the abdomen occur for the most part in those conditions in which we have the peritoneal cavity infected to a minimum or maximum degree, or potentially infected unless surgical intervention is instituted. Conversely we have pain accompanying lesions in which there is no likelihood of infection, becoming grafted in the peritoneal cavity and manifestly in no need of immediate surgery. Therefore, it is very evident other factors than pain insert themselves in the clinical picture and differential diagnosis.

When we consider the increasing death rate from acute abdominal lesions we are inclined to think, as John B. Murphy once said of appendicitis, that for every death someone is to blame. Early diagnosis and appropriate surgical treatment should be the *sine qua non* of every practitioner of medicine in any acute abdominal condition.



Enterostomy with Pezzer Catheter.

It has been our plan in arriving at a correct working diagnosis in these lesions to follow a definite routine:

(1) Remembering the most frequent abdominal affections.

(2) The securing of a complete history.

(3) Conduction of a thorough physical examination.

(4) Careful evaluation of the signs and symptoms present.

(5) The employment of laboratory aids where feasible.

In a series of 81 acute abdominal cases in our service we found:

49 cases of acute appendicitis,
8 acute intestinal obstruction,
3 strangulated hernia,
5 ruptured tubal pregnancy,
4 perforated duodenal ulcers,
1 acute diverticulitis (Meckel's diverticulum),
2 ovarian cysts with twisted pedicle,
6 acute suppurative cholecystitis with choledochitis,
2 gangrene of gall bladder,
1 ruptured gall bladder.

Thus the occurrence of acute appendicitis in the "acute abdomen" of this small series is well over fifty percent.

We shall not attempt to discuss every acute pathological condition which may arise in the abdomen, but rather limit our brief resume' to the more common of such lesions and their differential diagnosis, with what has proved to be the best in our hands in the surgical treatment.

The predominant acute surgical crisis in the abdomen, acute appendicitis, has its incipiency as an acute inflammatory process of the mucosa and submucosa which progressing may involve all coats of the appendix leading to gangrene and rupture with the ensuing dissemination of infectious material into the peritoneal cavity. The clinical picture present varies greatly with the stage and length of time of the infection. The most constant clinical symptom present is pain beginning as an epigastric or generalized abdominal pain, followed by nausea and vomiting which gives no relief, the pain becoming localized in the right lower quadrant, and often completely disappearing, which is very indicative of perforation and the advent of an early peritoneal involvement.

We have been impressed with the constancy of the suspension of respiratory movement of the abdominal wall, which has been a great help to us in cases where there was a question of pleurisy or an early pneumonia with reflex pain in the abdomen. Our experience has not borne out the idea that muscular rigidity is one of the most constant symptoms of acute appendicitis, as we have had many cases come to section with no apparent rigidity, yet with a gangrenous appendix. We have come to believe, with Deaver, that tenderness is relatively of more value than rigidity in early diagnosis, since rigidity as a rule depends on either visceral or parietal peritoneal infection. Hypersensitiveness of certain skin areas to stimuli has been of no value to us.

Rectal examination has been made as a routine measure, as both tenderness and a mass if present may be palpated in a relatively thin individual. This was impressed on us very forcibly while working in the Allgemeine Poliklinik in Vienna, Austria, with Professor Jacolowitz, who requires that every "acute abdomen" shall have a rectal examination before coming to surgery, and in that way has clarified many obscure diagnoses.

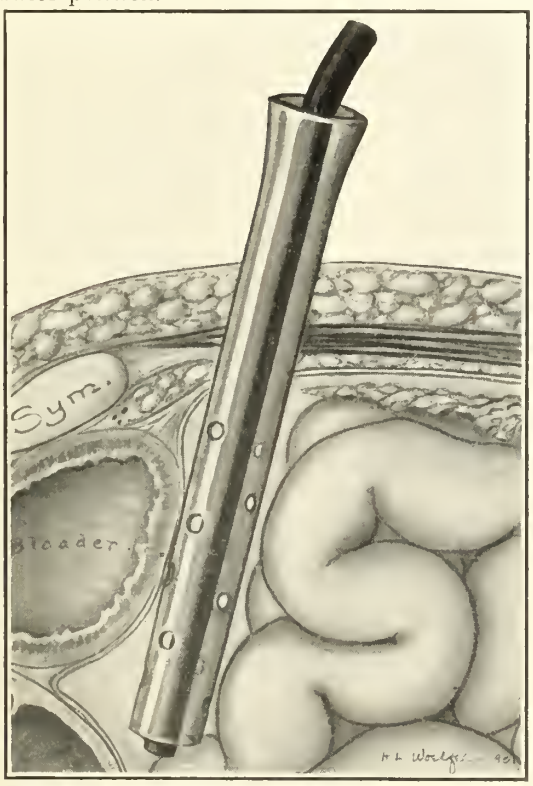
As to laboratory findings: We depend on the Schilling blood count, which has helped us in determining the virulence of the infection, and I recommend it to you as an aid of great diagnostic and prognostic value in acute abdominal lesions of infectious origin.

In the treatment of acute appendicitis we have come to some definite views which we think have

reduced our mortality to such an extent as to warrant their continued usage:

(1) Spinal anesthesia, which we use exclusively and which does not add insult to injury in some of these already toxic patients as does inhalation anesthesia.

(2) The complete suturing of the primary incision in drainage cases, and the use of a glass or hard rubber drain in the pelvis, introduced through a stab wound suprapubically; the introduction of a rubber tube drain through a stab wound in the loin which effectively drains the right kidney pouch; the employment of continuous suction by means of a soft sterile rubber catheter through the suprapubic drain, and the use of an exaggerated Fowler position.



Continuous Pelvic Drainage.

(3) The employment of enterostomy in cases where there is very extensive peritoneal involvement and the intestine loaded with highly toxic content.

There is no acute abdominal condition contributing more to surgical mortality than acute intestinal obstruction, many clinics reporting a mortality rate of more than forty percent. We have found the more frequent causes to be: (1) postoperative adhesions, (2) adhesions following pelvic inflammatory disease, (3) malignancy of the colon, (4) intussusception and volvulus in the young, (5) strangulation at a hernial site.

Acute obstructive symptoms are similar in all obstructions, only varying in degree of intensity, and location of the obstruction, whether high or low in the intestinal tract. The higher the obstruction, the more abrupt the onset of toxic manifestations and the greater the mortality when considering the time factor.

These cardinal symptoms have guided us and are always present in acute obstruction: Pain, obstipation, distention and persistent vomiting. We say persistent vomiting and not fecal vomiting, as we have come to look on fecal vomiting as not being a sign of obstruction, but rather as a sign of impending death. Increased and visible peristalsis are as a rule pathognomonic, but in many cases due to obesity may not be visible. Palpation very often reveals a mass in the abdomen as in intussusception or at site of hernial openings. Auscultation over the abdomen is of great aid in tracing sound waves to the site of obstruction by their metallic-like character and abrupt subsidence at the obstructive site. The use of the roentgen-ray and flat plate of the abdomen will oftentimes show the site of obstruction by gas and fluid level, and has been a helpful factor to us in confirming an early diagnosis before the onset of grave toxic symptoms. The blood picture has not been of great value to us, but on the contrary the chemical examination of the blood has proved a great aid due to the early depletion of blood chlorides, for as shown by Haden and Orr, there is always a depletion of the chloride content of the blood stream.

When thinking of acute intestinal obstruction we are apt to consider only the so-called primary mechanical type when in reality many "acute abdomens" present what we choose to term the secondary paretic type, which is secondary to an acute localized or generalized peritonitis. The differential diagnosis is imperative to successful surgical treatment. Both the prognosis and therapusis depend materially on the time elapsing from onset and active intervention, the mortality rising from hour to hour with the increasing bacteremia, toxemia, dehydration and perverted secretion.

We have adhered to the following treatment of these cases and have had no regret:

(1) In early cases of obstruction, six hours or less without toxic symptoms, where the obstruction is quickly and easily relieved without damage of the intestine, we close the incision without drainage, and force fluids both subcutaneously and intravenously.

(2) In late cases of the grave toxic type, with or without resection of the intestine, it has been our custom to perform enterostomy according to the method devised by Dr. George A. Hendon, of Louisville, which possesses the advantages of simplicity, speed and efficiency over the older methods. A distended loop of intestine proximal to the obstruction or line of resection is opened and a Pezzer mushroom tip catheter of medium size inserted while threaded over its obturator. After withdrawal of the obturator two pursestring sutures are placed, thus preventing leakage around the catheter. A piece of omentum may be placed around the catheter for greater safety if deemed

necessary. This has proved very efficacious in drainage of the toxic content and removing pressure from the anastomotic suture line. The subsequent removal by severing the catheter close to the intestine, allowing the tip to pass with the feces, has simplified this method over other procedures. The remaining channel as a rule heals rapidly.

We use salines intravenously by the continuous drip method as perfected by Dr. Hendon and named venoclysis, with the use of dextrose in addition, thus enough food value is given to support life without alimentation over a considerable length of time. This we believe has saved many patients not only because of the lack of reactions, but by furnishing continuous nutriment and increasing the depleted chlorides. In every case the exhibition of gastric siphonage has been productive of much benefit.

The pain of perforated duodenal ulcer or gastric ulcer differs from the pain of other acute abdominal lesions by its abrupt and excruciating onset, attended by an extreme degree of rigidity such as may accompany acute pancreatitis. The pulse rate in perforated duodenal ulcer as a rule is not much increased in the early stages, contrary to popular opinion, until the onset of peritoneal infection. Confusion in diagnosis is very common due to trickling of the stomach or duodenal content along the ascending colon to the right iliac fossa, simulating acute appendicitis.

In those cases coming to early operation, we have favored closure of the ulcer area, followed by rapid anterior or posterior gastroenterostomy and institution of drainage in the subhepatic space and pelvis. Late cases have done much better in our hands with a preliminary blood transfusion followed by simple closure of the perforation and suturing of omentum over the perforated area, together with drainage.

The frequent occurrence of acute cholecystitis as the causative agent in "acute abdomen" leads us to express our views on the surgical management. It is our opinion that no acute cholecystitis should be operated on in the acute stage unless there are marked symptoms of suppurative or necrotic cholecystitis. The mortality in the latter type of cases has ranged from twelve to fifteen percent, we believe not only from the primary condition, but from degenerative changes of the myocardium, liver and parenchymatous organs. In the young, with good resistance and no secondary damage, cholecystectomy may be performed, but cholecystostomy is attended with greater safety. In the elderly, with poor resistance and parenchymatous changes, cholecystostomy with prolonged drainage is preferred.

Acute salpingitis with acute pelvic inflammatory disease contribute their full quota of "acute abdomens" which are relatively easy of diagnosis by the antecedent history, vaginal examination and high range of leucocyte count. There is a general attitude both on the part of the practitioner and the surgeon that these cases should not have operative treatment until quiescent. With this we fully agree and advise no surgical intervention until the temperature has been normal for some time, maximum tenderness has disappeared, blood sedimentation time sixty minutes or more, with a decrease of the leucocyte count below 11,000. Excepting those acute cases which develop abscess formations in the posterior cul-de-sac, posterior colpotomy and drainage is necessary. We believe that in the acute cases sedatives for pain, cold or hot fomentations, Fowler's position, with intramuscular injections of milk extract, cause a more rapid resolution than other methods of treatment.

Hemorrhage within the abdomen, whether due to injury or rupture of a tubal pregnancy, presents a clinical picture which as a rule is very easy of recognition. In injury to a hollow viscus the vomiting of blood may be a prominent symptom, associated with the passage of tarry or bright red stools. Shock, clammy sweating, dilated pupils, and shifting dullness in flanks are usually present.

Ruptured tubal pregnancy is generally ushered in by an acute severe abdominal pain, followed by collapse, blanching of the mucous membranes, thirst, with a rapid, weak pulse and very slight abdominal rigidity. The history is that of a missed menstrual period and some previous menstrual irregularities. Distention of the abdomen is an accompaniment, with a doughy sensation and fulness in Douglas' pouch imparted to the examining fingers. Cullen's sign of discoloration around the umbilicus has not impressed us because of its infrequency. Reduction in the erythrocyte count is of very great value in a questionable case.

All cases of acute hemorrhage within the abdomen should be subjected to abdominal section at the earliest possible moment, after the subsidence of shock, a blood transfusion or saline intravenously given to counteract the blood volume lost, and the efficient control of hemorrhage instituted.

EYE STRAIN

DANIEL WITWER WEAVER, M.D.

GREENSBURG

Eye strain is (a) a fatigue due to an over use of normal eyes in an unfriendly environment, (b) from the normal use of eyes handicapped through a defective anatomical structure, or (c) a fatigue associated with a systemic pathology that causes a perversion or diminution of the nerve impulse to the visual apparatus.

The fatigue of eye muscles is not dissimilar to fatigue in other groups of muscles, except in that it produces more disagreeable nervous symptoms due to the fact that a disturbance of the visual function through the muscular fatigue causes the expenditure of an enormous amount of nervous energy, which brings about a nerve fatigue.

"The fatigue substance developed in the muscles causes an increased acidity which makes the muscles in the beginning more irritable and unstable, but as the substance accumulates the muscular irritability diminishes and eventually is abolished altogether. This diminution of the work-power of the muscles after over-exercise is due to the fact that the supply of energy-yielding material has been depleted."—Howell.

When the eye muscles are exhausted the visual function is lowered and the whole body becomes more or less fatigued.

Etiology: The causes for the development of eye-strain fatigue are:

First, a defective visual mechanism, which includes all the ametropias—the antero-posterior diameter may be too long or too short, abnormal curvature of the cornea, defective refractive media, displacement or absence of the lens, or muscular imbalance.

Second, a constitutional influence which leads to a premature fatigue. Under this cause one may include temperament, the various diseases of the eyes, toxemia, intestinal worms, intestinal irritation due to indigestion, the exanthematous fevers, mental worry, diseases of metabolism, syphilis, and tuberculosis.

Third, environmental conditions that cause the expenditure of an excessive amount of nervous energy. They include long hours of exacting visual work under deficient or improper illumination, intensive focusing at one position, exacting close work immediately after a heavy meal, glare, reflections, improper ventilation and irritating dust, gases or fumes in the atmosphere.

A defective visual mechanism alone does not cause eye strain symptoms, because we find many cases of high degrees of myopia, hypermetropia, muscular imbalance, and astigmatism that manifest no symptoms. We also frequently find individuals with emmetropic eyes with normal vision that suffer with eye strain.

In the majority of cases of eye strain an examination will reveal two of the enumerated causes, and frequently all three.

Symptoms: The symptoms vary somewhat in the different type of ametropic eyes.

In hypermetropia we have the following symptoms: The eyes tire easily upon close work, the lids burn or itch, causing one to press the eyes with the hands to relieve, the vision blurs, pain back of the eyes and in the temples, and daily headache in the frontal region that extends to the occiput is very common. Such reflex symptoms as vertigo, nausea, neuralgia and a general fatigue also are frequently very pronounced.

In astigmatism we find a weariness in the head, pains in the temples, frontal and occipital headaches which disappear during sleep but recur again upon using the eyes in exacting, close work, or from movies or riding on trains. A drowsiness comes on upon using the eyes for close work under artificial light and especially is this true in hypermetropic-astigmatism. A nausea, vertigo, and sometimes vomiting occurs when riding on trains or attending movies. The individual suffering with astigmatism frequently becomes very nervous, irritable, and if it is uncorrected through an extended period he becomes a neurasthenic, and may develop chorea.

Myopia seldom causes eye strain symptoms to develop.

In hyperphoria or where the visual plane of one eye tends to be higher than in the other eye, we find chronic hyperemia of the lids, a "feeling of sand in the eyes," with a tendency to rub the eyes with the hands, the images are confused when looking intently at close objects, and the individual is inclined to tilt his head toward one or the other shoulder. Drowsiness upon close application of the eyes is common, and occasionally one has a dull headache.

In exophoria, or where the visual planes diverge, there is a very pronounced muscular and nervous fatigue. The fatigue is not confined to the eyes alone but affects the whole body, and may be summed up in the term neurasthenia. Headache is constant with the close use of the eyes. Photophobia, gastric reflexes, nausea, vertigo, drowsiness and neuralgic pains in the face or head are frequent.

In esophoria, or where the visual planes tend to abnormal convergence, there is photophobia, with an increase of lachrymation, a blurring of the print after reading for a short time, which is followed by drowsiness. There also may be reflex symptoms as migraine headaches, a loss of appetite, nausea and vomiting when riding on trains, or attending movies, and various symptoms of a functional nervousness. The constant tension on the internal recti muscles tends to cause a muscular and nervous fatigue resulting in severe neuroses.

In ocular palsies we have diplopia, vertigo, headache and various nervous symptoms due to the fact that there is no fusion of images.

When normal eyes are fatigued through overuse in an unfavorable environment, nervous symptoms may develop. The earliest symptoms are a blurring of the vision, burning of the lids, and a "feeling of sand" in the eyes. Later headache, with a train of symptoms of nervous irritability, or in some cases a drowsiness.

Treatment: The treatment must be governed by the condition that exists in each individual case. The correction of the refractive error when one is present is of prime importance.

A thorough examination of the eyes, without a cycloplegic in order to obtain the manifest error and with a cycloplegic to obtain a measurement of the latent error, and a thorough survey of the lenses, retinæ, choroidæ and optic nerves for pathology that is a menace to good vision, is absolutely essential. The total amount of energy the ciliary muscles expend during accommodation cannot be estimated accurately in any other manner, and especially is this true in children or

individuals of nervous temperaments below the age of forty. The ophthalmoscopic examination does not reveal the exact status of the fundus without the use of cycloplegics, except cases of dilated and inactive pupils.

When the eye examinations of individuals who suffer with any of the enumerated symptoms of eye strain are made by the unskillful, or anyone who does not evaluate all the elements which enter into the production of these symptoms, the diagnoses can only be guess work. An examination must be made with and without cycloplegics in order to get an accurate registration of the total disturbance in the visual apparatus, except in presbyopia and even there a dilated pupil may be necessary in order to secure trustworthy information.

When a patient has a refractive error corrected without this thorough registration, and the symptoms of strain do not disappear, it is evident that the so-called "correction" is at fault and has no diagnostic value to the family physician.

The second factor to be considered in the treatment is the constitutional influence that causes a premature fatigue of the muscles of accommodation and of the motor oculi. Is the influence transient in character, as in exanthematous fevers, or toxemias, or is it chronic, as in disturbances of metabolism, tuberculosis, arterio-sclerosis of the retinal vessels, optic atrophy, choked disc, nephritic retinitis and syphilis? An evaluation of these factors is very important to the welfare of the individual's future vision. These conditions must receive constitutional and hygienic treatment and are as important as the refractive correction.

The third factor is the correction of the environmental influences that are injurious to the visual apparatus. Above all the elimination of glare, reflections and irritating dust and gases from the eyes; the correction of the illumination to suit the requirement, so that the light is of sufficient *quantity*, of good *quality, diffused, steady, falling from behind and to the side*, and not directly into the eyes.

When the family physician finds patients suffering with reflex symptoms, neuroses, neurasthenias, vertigo, nausea, headache, etc., that persist, and he suspects eye strain, he should refer these cases to the oculist or medical eye specialist for examination rather than to the commercial spectacle vendor. The oculist is a trained physician who knows local eye diseases as well as constitutional ones that affect the eyes, and he knows the mechanics of refraction. He can make accurate registration of the eye troubles as they affect the general health and in many cases anticipate serious pathology. Serious pathological changes frequently occur in the eyes which do not cause symptoms of eye strain, and many reflex symptoms attributed to other sources are caused by eye fatigue.

COOPERATION OF DENTIST AND OTOLARYNGOLOGIST*

F. J. Spilman, M.D.

CONNERSVILLE

When you know them well the dentists are not a bad lot and we do have an over-lapping of work. While making this statement I have in mind the maxillary sinus and the teeth. And may I add there is an intimate and positive relationship between the two.

It is the height of folly to do a radical operation on the sinus leaving an offending tooth to continue the diseased process. The upper bicuspid and first molar are the most common offenders and while they may not penetrate the floor of the sinus, this floor may be so thin it offers very little resistance to the tooth pathology and during extraction it is not difficult to push the apex of the tooth through the floor or by the use of the rocking movement that most dentists use during extraction may break down the diseased floor.

It sometimes happens that the maxillary sinus is the receptacle for lost articles as the root of a tooth, a whole tooth, a rubber drainage tube, gauze, cotton, *et cetera*. Confronted with such an unhappy situation the dentist might enlarge the opening and fish out the lost article, but much depends upon the development of his fishing proclivities. Should Lady Luck or Dame Fortune or both (there being safety in numbers) have accompanied the dentist on this unfortunate fishing expedition and have caused the removal of one or more of the adjacent teeth the accomplishment may not be difficult. Otherwise it is a case for the otolaryngologist and he should make an opening higher up as in doing the Caldwell-Luc operation, removing the foreign body and inspecting the cavity for disease. The presence of foreign bodies in the sinus will eventually cause violent reactions. Kindly permit me to say here and now that I do decry the practice of the extraction of good teeth for the purpose of draining the sinus and it is unbelievable that this would ever be done, but there are cases on record.

In many cases teeth beneath the involved sinus are missing or their removal indicated and any possibility of dental discomfort need not be considered. Chronic antral infection of nasal origin with normal and complete underlying dentition should of course demand the utmost care if treated by the Caldwell-Luc method. In doing the Caldwell-Luc operation the opening should not be made too large or too low, the pulpal blood supply should not be interfered with and any nerve impairment should be of a temporary nature, and inconsequential.

Some writers oppose the nasal opening beneath the inferior turbinate and advocate an enlargement of the natural opening, but this interferes

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with the blood supply and the venous return of the antral mucous membrane.

The attitude of dentists toward the maxillary sinus varies greatly. Many dentists on discovering an accidental perforation of the antral floor are unduly alarmed while others blindly explore and curret the opening and sinus itself, without rule or reason and in most instances postoperative observations and care are sadly neglected.

Following the elimination of the dental factor it should be the responsibility of the otolaryngologist to care for these cases. The oral surgeon is apt to overlook or fail to appreciate the frequency and importance of the nasal origin, such as septal deflection and secondary infection from the frontals and ethmoids. The oral surgeon treats many cases of apparent dental origin, while on the other hand the otolaryngologist sees a majority showing a close relationship to nasal obstruction, recurrent coryza following influenza, *et cetera*, each in turn magnifying and minimizing the importance of dental pathology.

The treatment of maxillary sinusitis falls in the majority of instances in the realm of the otolaryngologist, but until there is a full appreciation of dental pathology as a causative factor the treatment will be inadequate.

It is important that dentists be familiar with the symptoms of acute, subacute and chronic infections. Tooth pathology may be eliminated by vitality testing both thermal and electrical, x-ray and transillumination. X-ray films are often very misleading. All of us have seen many which make it appear that the roots of teeth penetrate the floor of the antrum when in reality they do not. Roentgenologists should exercise great care in acquiring the correct position of the patient in taking radiograms for sinus involvement.

Transillumination and the x-ray are aids to diagnosis but are not infallible and their results to be of service must compare favorably with the symptoms and physical findings. Both are more valuable where it is unilateral. Unfortunately this difficulty is occasionally bilateral, in which event the transillumination will throw shadows in both infraorbital regions and the pupils do not illuminate. And the x-ray will throw a light instead of a dark shadow in the region of the sinus. Up to the present I have had very little experience with lipiodol. Suction or negative pressure will aid in locating the pus in the proper nasal fossa.

In a brief review of the anatomy I would describe the maxillary sinus as a cavity, pyramidal in shape with three sides and a base, the superior wall of which is formed by the orbital plate of the superior maxillary bone. The outer wall is formed by the canine fossa and the posterior wall by the pterygomaxillary fossa and the base is formed by the lateral nasal wall, the alveolar process forming the inferior border of the canine fossa. The size depends upon the bone reabsorption, sex and age of the patient. Sometimes in the aged there is so much bone reabsorption in the canine fossa that there is little left except the periosteum and mucous membrane. The nasal wall is most important from the rhinologist's standpoint for the reason that it contains the only natural opening into the sinus, also for the reason that it is the thinnest of the walls, therefore the easiest point of entrance to the cavity in the case of disease. Not so long ago I did a Caldwell-Luc operation for a patient in which the bone of the canine fossa was completely absorbed. In entering the sinus it was not necessary to remove any bone.

The anterior wall or canine fossa is next in importance for this reason: It is the point of attack in case of radical operation and the infra-orbital foramen lies in this wall near the upper margin and must be avoided when performing the radical operation. The posterior wall is normally of even thickness and not being disturbed during operation is of less importance. The superior or orbital wall is of special interest for two reasons: First, because it is thin and sometimes contains dehiscences, and second because it is so near the orbit, orbital vessels and nerves. Because of the extreme thinness and the sometimes existing dehiscences the operator will occasionally get an orbital cellulitis or infection or both following lavage of the sinus especially through the natural opening as the washing solution makes its way into the orbital tissues while washing the sinus. This method of washing the sinus through the natural opening is very popular just now with some operators for the reason, I think, that it sounds less formidable to the patient to say that he will wash through the natural opening not making a puncture, adding that this is a new method. However, it is not difficult to do, as one has only to direct the point of the canula well downward, maintaining it in this position, in which position there is very little danger of entering the orbit. In my own personal experience the choice of procedure is determined by the condition of the patient's nose. With some types of septal deflection and other nasal deformities either one or the other may be difficult or impossible of accomplishment.

The natural opening to the sinus is just back of the anterior end of the middle turbinate in the middle fossa. However, in doing a lavage of the maxillary sinus I more often use a long straight needle with a soft rubber tube connection and a piston syringe going through the lateral wall just below and posterior to the anterior end of the inferior turbinate.

The alveolar portion of the boundary is not considered as important as formerly for the reason that now we think that twenty percent or less of antrum infection comes from this region, which is pleasant news for the dentist, I am sure. However, in each case the teeth should be examined carefully for we do know that at times we get apical abscesses that extend into the sinus. The antrum is more often infected than the other nasal accessory sinuses, namely, the frontal, ethmoidal and sphe-

noidal, for two reasons: First, the relationship of the teeth to the floor of the sinus; and, second, nature surely made a mistake when she placed the natural opening so far above the floor because it is quite impossible for a cavity to drain properly when the drainage must run up hill. Just why, I am unable to say, but I have had more of these sinus infections the past two or three years than any previous time that I have been in practice. We are learning more and more about the sinuses all the time and it is a common thing to relieve a patient of a morning headache by washing out the sinus even in cases where visible pus is not obtained. I feel it quite proper at this time to mention the vacuum type of cases which are the cases caused by the stopping up of the natural opening due mostly to a swelling of the mucous membrane lining the cavity. In these cases the air is absorbed by the mucous membrane producing a vacuum or a negative pressure which is just as painful as the one caused by positive pressure or those in which there is an accumulation of pus. Also, we must not forget that sinus infection may come from syphilis, tuberculosis, carcinoma and other constitutional diseases. The dentist should be constantly on the lookout for syphilis especially. It is surprising the number of cases of syphilis we may discover by looking into the mouth and throat.

Not so long ago I had a case of carcinoma of the mouth referred to me by a dentist, without a diagnosis to be sure, but demonstrating a keenness of observation on his part. Formerly it was supposed that all cases of antral empyema were due to dental infection. The teeth which were responsible for it were limited to the second bicuspid and first two molars, but now the teeth are blamed for only twenty percent or less. The most prominent symptom in empyema is pain. It may be and often is severe in the morning, sometimes assuming the character of what is commonly called a sun pain and usually on the corresponding side of the head. Sometimes the pain is superorbital, sometimes intra-orbital and sometimes is general and constant. There is nearly always a tenderness in the dental fossa. Pus appears in the middle fossa of the nose at the anterior end of the middle turbinate. The drainage may be serous, mucoid, mucopurulent or purulent, depending on the virulence of infection and manner of drainage. Should the natural opening be large, as it sometimes is, varying from the size of a buckshot to that of a small pea, the drainage would naturally be expected to be free and unhindered. Should the natural opening be closed or partially closed the drainage is apt to be more purulent. There is usually some disturbance of olfaction. There may be partial or total anosmia or a cacosmia. Where the drainage is free I have examined cases a number of times before proving my diagnosis.

Recently sinusitis has been popularized to the point where it is almost a competitor of the appendix for popularity. The subject is discussed at ladies' afternoon gatherings and pink teas almost as freely as Lindbergh's achievement, the latest Indiana political scandal or the day's list of murders. In fact an afternoon's discussion of current events is not complete unless the program includes sinusitis. Each member of the gathering can tell just which set of sinuses were involved in her own particular case and can boast of having had the newest method of treatment. The open window aeration method is discussed intelligently by the laity. And medical journals and medical men are talking about the open window as though it were a very new and only recently discovered theory. Many of us did this operation for patients a good many years ago and I have in mind now several that I can recall that still have good results from the procedure. Formerly we spoke of it as a permanent opening.

Empyema of the maxillary sinus is no trifling matter and is not without danger to life. In February of last year I operated a patient, doing the Caldwell-Luc operation, who died in less than two weeks and before leaving the hospital. Prior to operation the patient had mental disturbance accompanied by involuntary stools and disturbed reflexes, but we gave him the only chance he had for recovery by operating. His case was very chronic and of long standing. The sinus was filled with pus and polypi and he died of metastatic meningitis, which opinion was concurred in by a very prominent Indianapolis internist. I do not think, however, that it originated from the teeth.

There should be more frequent consultations between dentists and doctors. No doubt many teeth could be saved by closer contact between the professions. Too often the doctor suspects the teeth and sends the patient for extraction without a dental diagnosis, thereby placing the dentist in an embarrassing position, and often the teeth are extracted without results so far as the physical symptoms are concerned. Personally I place a high estimate on a tooth that still has a function and is not detrimental to the general health. The loss of such a tooth is a tragedy. The teeth are a very important part of the human anatomy and should not be sacrificed so long as they will function without detrimental results to the owner.

Dentists who have applied themselves faithfully to the solving of the problem of dental focal infection have come to realize that all the ills that human flesh is heir to are not due to dental focal infection or focal infection in the oral cavity, but the question of when and how the teeth and gums are the cause of systemic infection brings us up to the point of dental diagnosis, which must be handled by the dentist.

Patients suffering from arthritis, neuritis, endocarditis, gastric ulcer, conjunctivitis and iritis and other diseases that originate from focal infection do not go to the dentist for diagnosis, but they should be referred by the attending physician should there be any cause to suspect the teeth. And the dentist has the right to know the medical history as well as the dental history before passing

out his opinion on the case at hand. A patient with symptoms of focal infection should have proper consideration of his teeth, gums and sinuses as well as his tonsils.

I do not think it out of order that the dentist have access to the medical history, including blood pressure, blood chemistry, Wassermann reaction and urine analysis.

As nearly as possible the history of each treated, filled and crowned tooth should be obtained in order that he may ascertain if the dental history precedes the medical history. However, there are cases in which the teeth, tonsils, sinuses and other foci may be conspiring against the health and happiness of the host of these unwelcome guests.

On the other hand there are patients who have been hosts of the aforesaid guests for many years and it is beyond human understanding why they have had no systemic disturbance. Neither is it possible to prognosticate the duration of the apparent immunity.

Comparatively speaking I have no knowledge of teeth, but from what I have read am of the opinion that there is such a thing as a clean, harmless dead or crowned tooth.

I have another case report that is of interest from a dental standpoint but with which the sinuses had nothing to do. Only recently I saw this case in consultation. The attending physician gave a history of having removed a lower tooth which was very loose, following which there was a flow of a large amount of pus. Following this there was, a few days later, an abscess pointing under the chin which was opened. A few days later the boy, eight years old, was brought into the hospital when I saw him. He had a very much swollen face, a high temperature, delirium, disturbed plantar and patellar reflexes, pupils unequal and did not react to light, and he had a big exophthalmus in both eyes. We removed two more teeth with an ordinary hemostat, they being very loose, and their removal was followed by an enormous amount of pus. The boy had when I first saw him a septic meningitis or possibly a cerebral abscess of which he died a few days later.

In our own local county society we have had several joint meetings with our dentist friends at which time we discussed subjects that were of common interest to all present. We have entertained them, and they have entertained us. We have always found the meetings worth while and they do develop a better understanding between the two professions.

Summary:

First: In the treatment of maxillary sinus disease the rhinologist often fails to consider the possibility of tooth pathology as a causative factor.

Second: There are cases of antrum disease which require the services of a well-trained dentist for the detection of the tooth pathology.

Third: The examination of the oral cavity by the dentist should include radiograms, transillumination and vitality testing both thermal and electrical.

Fourth: Every case of antrum disease should have a thorough mouth examination by a competent dentist.

Fifth: A better acquaintance between the otolaryngologist and dentist will result in benefit to all concerned, alleviating the suffering and disability of the patient.

Discussion

J. D. McKay, M.D. (Marion): Dentists and otolaryngologists surely do have interlocking conditions almost continuously, and it behooves us to keep in close communication with the other profession.

Let us hurriedly take up three or four of the cardinal points. The essayist made a pronounced hit when he spoke of a so-called harmless dead tooth. It has been proven that a tooth that has lost its pulp, no matter if it has been what is called sterilized, goes on decaying at the roots, just like a tree that has died, the ground absorbing the decaying material. It is well known that the nerve filaments of the dentine are not removed with the pulp, so that four distinct poisons are generated: choline, putreseine, neurine, and cadaverine. Such teeth are described by Fisher of Cincinnati as surgical sequestra.

Questions have come to Doctor Spilman, as to all of us, such as, Shall we remove the tonsils before we have cleaned the teeth in trench mouth? Would we not get a more rapid result in tonsillectomy if the patient was given one or two injections of bismuth sodium nitrate to help him?

Again, we have an opening into the antrum after the extraction of a tooth, and the dentists should know that an antrum cannot become normal by draining through the tooth socket, but some persist in trying. The sooner they find out that a large nasal opening into an old, chronic antrum, yes, or a recently infected one, must be made to give drainage and ventilation, the sooner we will both accomplish something in getting our patients up and doing. Also let me state that quite a lot of useless delay has been the result of transillumination on the part of dentists as well as ourselves. X-rays should be resorted to more often if we want accuracy.

F. J. Spilman, M.D. (closing): I was in hopes that someone would express himself as to the merits of the use of the violet ray.

EXTRA-UTERINE PREGNANCY

(WITH A REPORT OF FIFTY CASES, INCLUDING ONE ABDOMINAL PREGNANCY)

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FORT WAYNE

Ectopic gestation may be defined as a pregnancy occurring outside the uterine cavity. In the great majority of cases this takes place in one Fallopian

tube, but it may occur within the ovarian substance or within the peritoneal cavity outside the uterine body and its adnexa. Both these latter conditions are rare and are usually conceded to be secondary to a primary tubal conception.

In 1927 Stein and Leventhal[1] added one case to a very meager list now in the literature of a true primary ovarian pregnancy. This answers the Spiegelberg qualifications, namely: The tube on the side of the pregnancy must be intact; the fetal sac must occupy the position of the ovary; the ovary must be connected with the uterus by the utero-ovarian ligament; definite ovarian tissue must be found in several places in the wall of the sac; the embryo must be visible in the cavity of the gestation sac; there must be placental tissue within the ovarian stroma; the tube must not only be intact, but free from any evidence of gestation.

Cases of abdominal pregnancy, even to full-term development, are rare but by no means as unusual as the former type. In this series one was encountered and happens to be one of the only three reported in this vicinity within many years.

Thorek,[2] in reporting a case of extra-uterine pregnancy developing to term, states that in reviewing the literature, a few cases have been delivered by laparotomy and have lived.

Farrar, from an analysis of 156,000 pregnancies occurring at the New York Lying-in Hospital, found ten cases of abdominal pregnancy, or an incidence of one in 15,600.

Sittner's statistics of cases of living children after extra-uterine development show that in a series of ninety-three such cases, forty-five children died within a few months after birth from causes connected with their extra-uterine development.

Occasionally an extra-uterine pregnancy terminates spontaneously with the death of the fetus, which, remaining *in situ*, may become impregnated with lime salts and probably cause little trouble except from pressure for many years. Such a specimen is termed a lithopedion.

Masson and Simon[3], in reviewing 445 collected cases of extra-uterine pregnancy in the literature, find this condition to exist in a little less than two percent of this class of pregnancies. The total number reported in print to date is 183. It is evident that, with the increasing tendency toward surgery, laparotomies will further forestall this occurrence on account of removal before calcification takes place.

Ferguson[4] reports one case of a primary abdominal pregnancy in which the fetus was carried ten months past the date of confinement. It was dead, but not badly decomposed, at the time of operation.

The tubal pregnancy is by far the most common of extra-uterine conceptions. In a report by Ponnoyer[5] of 5,763 gynecological operations performed in eight years at the Roosevelt Hospital, 188 were for ectopic pregnancy. Wynne[6], in his long series covering a period of twenty-seven years, finds the incidence to be about one percent. Farrar[7] finds his incidence to be 1.5 percent. In the series here reported, the incidence is slightly higher, running about 2.25 percent.

Pathologically considered, the tubal pregnancy usually occurs within one of three areas, namely: the interstitial, or tubo-uterine, where the growth encroaches upon the uterine wall; the true tubal, or that occurring in the central portion of the Fallopian tube; and lastly, the tubo-ovarian, or infundibular type, affecting the outer end of the tube.

Following conception in any one of these areas, a decidual reaction rapidly develops and the mucosa is transformed into the decidual membrane. This fact was proven by Kline[8] in 1928 in a series of seventy-four cases at the Mt. Sinai Hospital in Cleveland.

As the growth continues, the muscular coats of the tube become congested, hypertrophied, and finally transformed into fibrous tissue. The site of placental implantation gradually atrophies so that, sooner or later, rupture of the tube occurs and the ovum escapes into the abdomen or into the substance of the broad ligament, where it either dies or continues its development in the new environment. In the latter case, the placenta readily affixes itself upon any adjacent structure and may invade almost any structure within the belly.

Concurrently with these changes within the tube go uterine changes. In this organ an early decidual reaction is noted and it slowly continues to enlarge and soften with the progress of the growth of the former.

In abdominal pregnancies at five months, the uterus is usually found to be about one-third smaller than in an intra-uterine pregnancy and if the process continues to term it is usually from five to six inches long. Upon delivery of the pregnancy it is not uncommon to have the decidual cast expelled and the involution syndrome proceed as after a normal labor.

Occasionally a double tubal pregnancy occurs, as in the case reported by Clow[9] in 1926. Payne[10], in 1924, reported a similar case.

One case in this series was operated for a perforated right tubal pregnancy, the same being complicated by an apparently normal uterine pregnancy. This patient made an uneventful recovery from the surgical procedure and seven months later was delivered of a full-term viable fetus. It was thought at the time of operation that the enlarged, boggy uterus was due to the natural changes in that organ accompanying pregnancy within the tube.

Steckbauer[11], in 1926, reported an ectopic pregnancy in an anomalous Fallopian tube attached high upon the lateral wall of the pelvis. Close to this tube was a large ovary, also attached to the pelvic wall, both being entirely separate from the uterine body.

As to its direct etiology, little is known definitely. It is generally considered that anything producing a kink or a twist in the tube or hinder-

ing or preventing the onward passage of the ovum is a potent factor.

Pelvic inflammation, dating perhaps from previous pregnancies and causing little or no subjective discomfiture, may be a real cause since by far the greater number of ectopics occur in multiparæ. Pennoyer, in his series, finds it to occur in 85 percent. Brady[12], in a study of fifty cases, found that 88 percent had had previous uterine pregnancies. In this series 89.2 percent were multiparæ. Of this number less than one-fourth had been delivered of one child only.

While ectopic pregnancy can occur almost at once after a normal puerperium, it seldom does and the average interval in this series is a little over five years.

One case was operated in September, 1926, for a ruptured ectopic on the left side. A year later, almost to the day, I again operated her for a right perforated ectopic pregnancy. Three other cases had had previous laparotomies for ruptured ectopics.

Approximately twenty percent gave history definitely suggestive of pelvic inflammation prior to the symptoms directly referable to the developing ectopic pregnancy.

The age distribution was as follows:

Below 20 years	1
Between 20 and 25	3
Between 25 and 30	13
Between 30 and 35	17
Between 35 and 40	10
Between 40 and 45	5
At 45	1

The sides involved seem about the same, those of the right side numbering twenty-nine and those of the left twenty-one. Of the four mentioned cases having both tubes involved, three had the left tubes involved first and one the right.

The menstrual history prior to the time of the gestation syndrome seemed to bear little relation to the disease. About half complained of delayed or painful periods. The majority had backache, but as this is common to almost all women, little significance was paid to it with reference to this complaint.

The clinical history of an ectopic gestation quite readily falls into two phases, one from the early pressure and invasion symptoms within the tube and the other after actual perforation.

Pain is present in almost every case. In this series there were no exceptions. It ranges from a vague uneasiness in the pelvis and back to a violent unilateral paroxysmal pain which, in over half of this group, was characterized by the patient as being stinging. During the early stages the pain is intermittent, that is, not present every day but at irregular intervals, but with each recurrence it becomes more severe and shows a tendency to become localized in one lower pelvic quadrant.

The concommitant symptoms of pregnancy are not always present. In thirty-six of the cases here reported there was a definite history of cessation of menstruation for a period of thirty days or over.

Irregular bleeding was noted in forty-seven cases. This varied from a slight tarry discharge to almost a frank uterine hemorrhage. This last condition was noted in one case that proved to be an interstitial ectopic. The recurrence of lower abdominal pain and irregular vaginal bleeding constitute the predominating symptoms.

Wynne, Frank[13], Farrar, Brady and Pennoyer all have reported pain being present in ninety-six to ninety-nine percent of cases of ectopic pregnancy and they have noted vaginal bleeding as occurring in about sixty-five to seventy percent.

The average time of duration from the onset of the symptoms until the entrance into the hospital was in this group twenty-six days. The shortest time was less than a half day and the longest was about five months. This last was proved to be an abdominal pregnancy with a dead fetus approximately five months of age.

The associated general symptoms were not so constant. Breast changes were noted in twelve percent. Nausea and vomiting were present in approximately sixty-two percent. Bladder irritation was complained of in four cases and in one a burning pain in the rectum was recorded.

At the time of perforation the syndrome is essentially one of shock with prostration and evidence of severe anemia. The pain is generally more severe, cramp-like, and usually definitely localized below the navel and more severe on one side. One of these cases complained of the pain being most severe in the right side and the ectopic was found to be in the left tube.

There is no more striking picture characteristic of the disease than is seen in the perforated ectopic pregnancy. The peculiar pallidity of the facies, rapid, weak pulse, prostration and lower belly tenderness stamp themselves indelibly upon the clinician's memory.

Pelvic tumor with definite mass palpable through the vaginal wall was noted in thirty-eight cases. Vaginal examinations were not made on ten of the patients as the diagnosis was obvious. Of those so examined practically all had enlarged and boggy cervices.

Not all cases experiencing such prostration came at once to the hospital. In four, such a history was obtained. In this condition, if the hemorrhage does not terminate fatally, there is usually some amelioration of the symptoms and, if the ovum escapes into the broad ligament or into the belly cavity and dies, a gradual convalescence may ensue. Usually, however, within a few days there is a recurrence of the perforation symptoms which rapidly place the patient in such a critical condition that hospitalization ensues.

The temperature at the time of perforation was seldom taken, as it usually occurred at home. The average fever at admission was 99.1 degrees. If shock and prostration were recent and severe, the temperature was often subnormal. One case was recorded of having a fever of 102.5 degrees and

this was one having a slow-leaking hemorrhage from the right tube for about eight days. The more rapid and extensive the bleeding, the higher the fever.

The average leucocyte count was 15,200. Two showed white counts of less than 9,500. Both these were cases having symptoms of hemorrhage for over ten days. The hemoglobin ranged from thirty-one percent to sixty-eight percent. The lowest red cell count recorded was 1,400,000.

Difficulties in diagnosis are numerous. If the case presents the text-book picture it is very easy. It is in the borderline case, where explosive perforation with its shock and abdominal hemorrhage are not present, that one is called upon to decide whether the pathology is extra-uterine pregnancy or not.

Appendicitis, ovarian cyst, incomplete abortion, salpingitis, and fibroids comprised most of the mistakes made in preoperative diagnoses. One case, studied in the hospital with all the facilities for diagnosis at hand, was finally operated for pelvic inflammatory disease and found to have an eroding ectopic of the right side with considerable blood in the belly. This patient was past forty-five years of age and had borne no children for over fourteen years.

Meyer[16] and Lash reported a case in 1929 of a tuberculous salpingitis closely resembling ectopic pregnancy.

About sixty percent of these cases were diagnosed preoperatively as extra-uterine pregnancies and in almost all of these the picture of acute hemorrhage and shock was paramount, otherwise the percentage probably would be less.

Forty-one of these cases were operated upon the same day they were brought in and about half of this number within a couple of hours. The cases with symptoms simulating pelvic inflammatory disease averaged two and one-half days in the hospital before surgery was done. A diagnosis of unruptured ectopic pregnancy was made and confirmed in one case only in this group. Diagnosis of unruptured ectopic pregnancies that proved to be something entirely different have often been made by competent men.

The interstitial type is not common, but is the one usually fraught with the most danger when it does occur due to the preponderance of blood supply over the other areas of the tubes. Rosenthal[14], who investigated 1,300 ectopic pregnancies, found that this occurs in about three percent. Other investigators, including Wynne, Martin and Oaster, find it in less than two percent. In this series there was one case and this terminated fatally from hemorrhage about ten minutes after the operations had been completed despite transfusions before and after surgery.

Dutchess[15] reports one case of an unruptured interstitial ectopic pregnancy operated recently in which the patient recovered after a stormy convalescence.

Upon the assumption that a diagnosis of ectopic pregnancy is made, when to operate is a question of considerable debate. In 1919, Truelson[17] reviewed and published a resume of the works of leading men having had considerable experience in the handling of extra-uterine pregnancies and found, essentially, two different opinions.

The one school believes that after perforation the surgeon should wait until shock and active hemorrhage has ceased. In this the treatment consists of: (a) Placing the patient in extreme Trendelenberg position; (b) administering a hypodermic of morphine and atropine; (c) counting the pulse every fifteen minutes; (d) taking the blood pressure until it reads 115. (e) giving no salines or stimulants. And with the pulse at or about 120 and the blood pressure as given, it is then safe to operate.

The other school contends that immediate operation is the wiser course. It would seem from personal observation that this latter view has much more to commend it than the first. Why?

Because one cannot be sure, in view of the many courses that an ectopic may run, whether the hemorrhage will cease or become more profuse. The longer a patient bleeds, the more profound the shock and the greater the depression, for the presence of blood in the peritoneal cavity is a potent factor in producing vaso-motor paralysis. The greater the depression and hemorrhage, the poorer the recuperative powers the patient has after surgery. If a patient improves without operation, it seems logical to believe that she would be better off with it, and to wait on account of the slight additional shock entailed in surgery may mean the wasting of precious moments and the patient's life. That they can, and occasionally do, bleed to death from an ectopic pregnancy is a fact that has been demonstrated.

It would seem that in some cases where the hemorrhage and shock are very severe, the patient would be better off if the laparotomy were performed in the home rather than to have them moved and transported many miles over rough roads.

In cases where these symptoms have become temporarily arrested, there need not be so much haste. Blood transfusions are of great value and their use is to be encouraged in cases of exsanguination. We have employed the citrate method and have usually given them when we could just before operating. Two cases were transfused after the operation.

Maynard and Reese[18] report one case in which 700 cubic centimeters of abdominal blood was auto-transfused into the patient where a donor was not available immediately. It was done by the citrate method and recovery took place where death had seemed imminent.

In the event of a diagnosis of abdominal pregnancy there are again two views held. One is that the operation should be performed as soon as possible. The other believes that it is better to

wait and bases this view upon the fact that after the death of the fetus the placenta begins to disintegrate and loses some of its extreme vascularity so that surgical removal of this structure is not attended with profuse hemorrhage and usually death. The former takes the stand that delivery by section of the fetus and leaving the placenta *in situ*, walled off as much as possible, and permitting it to slough away is the operation of choice. This method is known as "marsupialization".

The one case of abdominal pregnancy encountered in this group is reported on account of its rarity.

Mrs. A. D. G., age thirty-four, housewife, was admitted to Lutheran Hospital July 21, 1929, complaining of cramp-like, lower abdominal pain, nausea, chills and weakness. She had borne no children and, except for the exanthemata in youth, had always had good health. She had had no miscarriages. Married nine years. Menstrual history negative except irregular vaginal bleeding for the four months prior to admission.

The belly symptoms had been present with an increasing severity, spasmodic in type, for about eight weeks, but until the last week had not caused her to become bedfast.

Upon admission she looked septic and there was a tender tumor mass in the lower right side about the size of a football. There was generalized abdominal rigidity and tenderness of moderate degree. Pulse, 110; temperature, 101.2; white blood count, 16,500, with 91 percent polymorphonuclears.

The other signs of pregnancy were present and, in the belief that a slow-leaking ectopic was present and an organizing or infected blood clot would be encountered, a laparotomy was done.

The operative report is as follows:

"Midline incision. Free straw-like fluid in abdomen. A friable mass resembling carcinomatous invasion of the omentum is encountered. This proved to be a portion of the placenta with the umbilical cord attached. A dead fetus of about five months was found imbedded in the right lower abdominal quadrant surrounded by an entire amniotic sac which was adherent to all pelvic viscera. Uterus about the size of an orange and showed no evidence of perforation. Both tubes and ovaries intact, but those on the right side were adherent to the placental mass. The placenta was large and adherent to the small bowel, the parietal peritoneum, mesentery and the under surface of the liver. The fetus, membranes and a part of the placenta were removed, but the main portion of the placenta could not be detached on account of active hemorrhage. Marsupialization was done."

The patient reacted fairly well during and after the operation, but pursued a very septic course and passed away six days later.

The operative technic used in this series consisted essentially in a midline incision, localization of the affected tube and its removal as quickly as possible. Drainage was used in five cases. Generally speaking, it does not seem necessary.

The average time duration in the hospital was 15.5 days.

In this group there were four deaths. Of these, one was the abdominal pregnancy; one, an interstitial tubal pregnancy, died a few minutes after her return from the operating room due to loss of blood and extreme shock; two deaths ensued within a few days, due to shock and hemorrhage. Infection may have played a part in these latter cases. Wynne reports a mortality of 4.3 percent; Frank, 3.75 percent; Oaster, 6 percent and Farrar, 1 percent.

It may reasonably be expected that, with early surgery and good hospitalization, the mortality rate should, in proportion to many other dreaded maladies, be comparatively low and that the final results, under average circumstances, are quite favorable if taken in time.

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INTRA-UTERINE RUPTURE OF THE INTESTINE

(Case Report)

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INDIANAPOLIS

In 1929 Dr. M. J. S. sent a patient in for cesarean, abnormal pelvis making the normal route of delivery impossible. In 1931, the patient being again at full term, cesarean was advised. She, however, was convinced that she had increased in size and would not accept the operation without an attempt at delivery the natural way. After twenty-four hours' fruitless labor, she agreed again to cesarean and entered the hospital.

Classical cesarean this second time delivered a well-formed male child, alive, but not vigorous. Its abdomen was distended with fluid and gas. The child died at the end of the cesarean, showing no response to the usual measures of resuscitation.

Permission was given to open the abdomen. This was done, and found to be full of fluid, gas and intestinal content. The stomach and small bowel were found to be normal in all respects. The cecum was normal in structure for a distance of an inch up from the ileum. There was a rent in the cecum about an inch from the ileum, which had allowed the ileum to empty into the peritoneal cavity. Just distal to the tear in the cecum the large bowel contracted into a small white cord-like structure about a quarter of an inch in diameter. The entire large bowel from the cecum to the anus was composed of this cord-like structure. A section was sent to the laboratory for microscopic study and was reported as follows by Dr. Banks at the Methodist Hospital:

" * * * The muscle coats of the zone of narrowing become indented, are heavily covered on the exterior surface with cicatricial tissue. The muscle coats appear to be markedly hypertrophied at the point of constriction, and the mucosa lining the musculature is markedly atrophied and in some zones entirely destroyed. There is no evidence of any active inflammatory process at the points of denudation of the mucosa in the zone of constriction. The lumena is reduced to almost microscopic proportions in this zone. This zone occurs for a definite segment and then abruptly changes into normal architecture of the colon. * * *

"Impression: Stenosis of the colon, due to cicatricial tissue."

There are a few interesting features of this case that might be added to the above description. First, there were no other abnormalities or developmental failures found at the partial autopsy. Next, it is of interest to see that the amniotic fluid which was present at the time of operation did not act to prevent traumatic rupture during the uterine contractions. A bubble of gas, a peristaltic wave and a uterine contraction meant rupture in this case. Another point worth note to the surgeon was brought out during operation. Classical cesarean was done each time. At this second time it was readily seen that there was no visible scar on the surface of the uterus. The thickest part of the uterus at the end of the labor was in the mid-line at the site of the former incision. There was no scar tissue thickening or inelasticity of the uterine wall. This bears out the accuracy in the belief that the uterine wall can be sutured together after cesarean in such a manner that there is no weakness if normal healing occurs. Pregnancy following cesarean can be delivered the normal route if such healing occurs. I know of no plan that can be followed to determine whether such union has occurred, and have watched at the confinement of such patients with some anxiety. It is probably safest to adopt the slogan that "Once a cesarean always a cesarean" since mortality statistics show that danger from the operation is that of ordinary clean surgery. In cases that had gone through normal, uneventful convalescence second cesarean has showed the thinnest of scar that seemingly would have ruptured if subjected to labor. The role of exhaustion and slow involution of the uterus cannot be measured accurately, and therefore it is safer to repeat the operation with repeated pregnancy.

A final most interesting feature of this case is the fact that the child delivered at the first cesarean two years ago was also apparently a normal child. It lived only six months. It died from a nutritional disorder and starvation. Diet changes had no effect upon the outcome. X-ray showed no demonstrable pathology. No positive findings of any kind were obtained before death. It is interesting now to speculate upon the possibility that there may have been a failure in development of digestive glands or absorbing mechanism, a minor degree of the same pathology found in the second child. In the absence of autopsy of the first child, speculation only can be had. What the future holds for the parents of these two children will be watched with some apprehension and considerable interest.

SPECIAL ARTICLE

DIPHTHERIA DEATHS IN INDIANA AUGUST, 1931

We are very glad to be able to report that diphtheria deaths for August of 1931 were as low as five for the entire state. Last year during August there were eleven deaths. To date we are ten deaths under last year at the same time. If the same ratio continues, we should be able to establish another low rate. The counties that are breaking into the black column this month are Crawford and Knox. Madison County has had another death, making six for that county. This is the greatest number of deaths from any county of the state. Marion County had its second death for the year—an excellent record.

Upon looking over morbidity reports for August we find that no cases have been reported from either Crawford or Knox County during the preceding three months: no cases reported but three deaths took place. Draw your own conclusions. The fact of the matter is that the biggest drawback in the fighting of diphtheria in Indiana is the fact that physicians cannot, will not, or do not report their cases. Of course they must report their deaths. We have no doubt that if the Diphtheria Prevention Committee would give the names of the doctors who had these deaths but who have not reported the cases, there would be a big howl

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EDITORIALS

THE INDIANAPOLIS SESSION

Braving Hoosier humidity and the terrors of the depression 1,279 physicians, their families and guests attended the eighty-second annual session of the Indiana State Medical Association in Indianapolis September 23rd, 24th and 25th and golfed, banqueted, reunioned, listened to a most interesting scientific program and held what might be termed one of the most satisfactory meetings in the history of the state organization. Of the number of registrants 1,033 were doctors—839 members of the association, 194 visiting physicians, medical students and interns. Of the remainder 54 were exhibitors and the rest were wives and daughters of physicians. This is the largest attendance ever recorded at an annual session.

Dr. Joseph H. Weinstein of Terre Haute, who as a councilor and in various other capacities has rendered long, honorable and enthusiastic service in behalf of the association, was elected president for 1933 without opposition, and Michigan City was selected for the convention city next year, the choice coming on the second ballot over Lafayette after West Baden had been eliminated on the first vote.

Dr. A. F. Weyerbacher was elected treasurer to succeed Dr. William A. Doeppers, who resigned amid honors after serving since 1926 in that capacity. Dr. Franklin S. Crockett of Lafayette, president-elect of the state association, and Dr. Albert E. Bulson, editor of The Journal, were re-elected for two-year terms as delegates to the American Medical Association. Dr. R. L. Sensenich, of South Bend, as alternate automatically took the position as delegate left vacant by the death of Dr. David Ross, and Dr. George J. Geisler, of South Bend, was elected to fill Dr. Sensenich's term as alternate. Dr. Walter C. McFadden, of Shelbyville, and Dr. G. D. Scott, of Sullivan, were re-elected alternates for Dr. Bulson and Dr. Crockett, respectively.

Dr. H. H. Wheeler, of Indianapolis, was named by the Council to fill the unexpired term on the Executive Committee occurring due to the death of Dr. Ross. Dr. Wheeler's term runs until January 1, 1932.

Section officers were elected as follows: Surgical Section—Dr. W. E. Finney, Indianapolis, chairman; Dr. E. Vernon Hahn, Indianapolis, vice-chairman; Dr. George A. Collett, Crawfordsville, secretary. Medical Section—Dr. Herman M. Baker, Evansville, chairman; Dr. Harvey L. Murdock, Fort Wayne, vice-chairman; Dr. B. G. Keeney, Shelbyville, secretary. Section on Ophthalmology and Otolaryngology—Dr. F. V. Overman, Indianapolis, chairman; Dr. Hugh A. Kuhn, Hammond, vice-chairman, and Dr. C. A. Robison, Frankfort, secretary.

The following auxiliary officers were selected: Mrs. L. E. Fritsch, Evansville, president; Mrs. O. O. Alexander, Terre Haute, president-elect; Mrs. J. C. Armington, Anderson, secretary, and Mrs. C. F. Voyles, Indianapolis, treasurer.

The meeting got off to a flying start despite showers and hot weather with a record-breaking entry list of 183 golfers teeing off at Broadmoor for the annual championship. Dr. Robert R. Acre, of Evansville, one of the keenest shooters in the state, inside or outside the profession, rambled away with the Armstrong trophy and low gross honors with a well-played 79. Second low gross went to Dr. Harry L. Cooper, of South Bend, who scored an 83. Dr. John W. Graves, of Indianapolis, was the low net shooter, while Dr. J. J. Littell, of Indianapolis, was second low net scorer. These four contestants led a generous list of prize winners too voluminous to mention. The prizes were donated by various merchants of Indianapolis, among them being the Wm. H. Armstrong Company, Pitman-Moore Company, Akron Surgical House, Hook Drug Company, Gus Habich Company, Em-Roe Sporting Goods Company, Mooney-Mueller-Ward Company, Parke, Davis & Company, Walgreen Company, White-Haines Optical Company and Johnson & Johnson.

The preliminary day's activities were completed with the Council meeting and the House of Delegates, which was run off smoothly by President A. B. Graham, of Indianapolis, who presided at all the business and scientific meetings.

"The Second Man" by the Indianapolis Civic Theater Society, with Lois Graham, daughter of President Graham, and Mrs. Katherine Pantzer, daughter-in-law of Dr. Hugo Pantzer, of Indianapolis, playing the leading feminine roles, supplied the entertainment on Wednesday night.

The scientific meetings Thursday and Friday were fine, the "all Hoosier" type of program on the whole being very satisfactory. Feeling is growing that a postgraduate or series of instructional courses would be vastly worthwhile during the state session.

Dr. Edward Henry Cary, of Dallas, Texas, president-elect of the American Medical Association, guest of honor of the Association during the session, and Dr. H. H. Shoulders, of Nashville, Tennessee, secretary-editor of the Tennessee State Medical Association, were the principal banquet speakers. Dr. Cary spoke on "Some Problems of

the Modern Physician," while Dr. Shoulders outlined briefly his plan of insurance sick benefits for World War veterans in non-service disability cases.

The four hundred odd diners enjoyed both talks as well as the preliminaries, the high points of which were presentation of certificates of merit by Dr. E. M. Shanklin, of Hammond, former president, on behalf of the State Association to Dr. Angus C. McDonald, of Warsaw, past president, and by President Graham to Dr. Doeppers in appreciation of his service as treasurer of the Association. Dr. Doeppers' humorous speech was carried from coast to coast by a special one-station radio hook-up over Station RAZZ, Bill, acting as chief announcer, told his expectant audience.

Special mention should be made of the scientific exhibit which was more interesting and elaborate than ever this year. Dr. Ernest Rupel, of Indianapolis, has built up these exhibits until they are one of the features of the meeting.

The visiting ladies had nothing but words of admiration for the Woman's Auxiliary to the Indianapolis Medical Society, who acted as hostesses at numerous delightful garden parties, luncheon teas, and receptions. The State Auxiliary meeting was most interesting with Mrs. William S. Tomlin, the present president, presiding, and Dr. Miles F. Porter, Sr., of Fort Wayne, making the principal talk.

In closing thanks should be extended to Dr. R. Wynn S. Owen, general chairman, and the local committees for the successful local arrangements and entertainment. Thanks of the Association also are due to Raymond Bright and Albert Porter, of the Indiana State Board of Health, who took charge of the moving pictures and lanterns under the directions of the local committee on arrangements during the meeting.

SCARLET FEVER IMMUNIZATION

Justification for the use of scarlet fever streptococcus toxin for the production of active immunization is founded on data presented by various independent workers. The use of such toxin, however, is not without unpleasant reactions which while not in themselves dangerous to life are of sufficient moment to make the clinician reluctant to use the toxin and more often to cause the parent to refuse further treatment. The need of five immunizing doses makes its use expensive whether administered by the private physician or *en masse* as a public health measure. In order to receive general favor, preventive use of this measure must be relatively free from discomfort, require a minimum of injections and be inexpensive. Surgeon M. Z. Veldee of the United States Public Health Service has been carrying on some experiments in the hope of accomplishing the desired end, and recently has reported his results (*Public Health Reports*, March 27, 1931). He treated the scarlet fever streptococcus toxin with three-tenths percent of commercial formalin and then subjected the toxin to a temperature varying between 37 and 38 degrees Centigrade. About two weeks later one-tenth of a percent additional formalin was added. After eight weeks of continuous storage at the above temperature the material was removed and tested for toxicity on several susceptible individuals. The reaction produced by injecting intradermally one-tenth cubic centimeter of a one to one-hundredth dilution was of no greater intensity than that produced by one tenth cubic centimeter of a one to six thousand dilution of the original toxin. Thus all but one and seven-tenths percent of the skin reacting factor had been eliminated. This is actually less than the amount of skin reacting factor remaining after the original scarlet fever streptococcus toxin has been heated to 80 or 85 degrees Centigrade for one hour. The residual skin reaction factor in the detoxified material is also heat stable.

This detoxified antigen was employed for the active immunization of 150 Schick-positive individuals. Out of 115 persons tested with the detoxified toxin, 96 were retested following treatment, with only three giving a positive reaction. Commenting on this the author says, "Experimental work presented confirms the findings of other workers that scarlet fever streptococcus antitoxin can be rendered much less toxic by subjecting it to heat and formalin. The antigenic value of the toxin apparently is not destroyed by the action of the formalin or by the prolonged exposure of from 37 to 38 degrees Centigrade. The amount of antigen tolerated by susceptible individuals in each injection is greatly increased by this method of detoxification, so that the number of doses required for actual immunization may be reduced; at the same time the reaction following the injections occur so much less frequently and their severity is markedly diminished." Further experimentation, it is hoped, will develop a technique for removing the remaining toxic factor, thereby eliminating all disagreeable reaction and permitting the use of greater quantities of antigen.

SCHOOLROOM VENTILATION

As the schools open the problem of ventilation again comes up. It is too bad that mechanical engineers are looked upon as being the final authorities in a matter which is strictly physiological in its proper scope and becomes epidemiological as it is badly handled. The ventilating engineer really knows nothing about the need of ventilation, but only how to move a certain number of cubic feet of air per minute. As a matter of fact nearly all medical and health authorities agree that open window ventilation with each room as a ventilating and heating unit under the control of an intelligent teacher is the best method to insure proper ventilation. The engineer of course has some sort of fit every time so simple an arrangement is mentioned. He strongly favors

a complicated system, with all sorts of do-dads and jim-cracks to control and be controlled.

By most methods of building schoolhouses we spend thousands of dollars to make the building air tight and then spend a lot more to pump the air in. We insist that all windows must be closed while the heating plant is in operation, and then when the school children get sick as a result of living in so artificial an environment we send them to the fresh air school with open windows everywhere to get them well and robust again. It would seem that a few open windows might have helped to save the precious health that needs to be regained from open windows. Medical authorities say that open window ventilation is best; ventilating authorities say that the windows must be closed. Whom shall we believe? Inasmuch as the proof of the pudding is the eating thereof, the experience that children have least respiratory infection when they go to school in rooms sensibly ventilated by open windows seems to have settled the question definitely. Studies made in New York and Washington have indicated clearly that such relations actually exist. The committee appointed by the American Public Health Association for the study of ventilating problems has recommended strongly the use of the window as the best means of insuring healthful air in the schoolroom.

It is not unlikely that the biggest thing in correct ventilation is the psychological element. Children like to *feel* the fresh air from the outside. When the window is open it seems as if one is in continuity with the big out-of-doors. It seems as if he is not entirely hemmed in by the irksome walls which may at times assume the mien of prison walls. Ventilation is much more a matter of sensation on the skin than it is a condition that insures the proper chemical reactions in the lungs. Paraphrasing a well-known bit of wisdom commonly disregarded by dietitians, we would say that "School children do not live by oxygen alone".

COLLATERAL CIRCULATION IN THE LUNG

The study of areodynamics involved in the physiology of respiration has revealed some very interesting and important facts. Bronchial occlusions are now regarded as a basic factor in the production of many acute pulmonary disturbances such as massive postoperative atelectasis or collapse, postoperative pneumonia, etc. An interesting contribution to this subject appears in the July number of *Surg., Gyn. and Obs.*, by Van Allen and Lindskog, in an article on "Collateral Circulation in the Lung". The authors show by some surprisingly simple experiments that the bronchial tree in a lobe of the lung is not a blind ending series of tubes at the periphery of the lung, but that there are interconnections between the trees within each lobe. These connections make possible a collateral circulation of air in the lobe, which circulation is of great importance to proper respiratory function. They show that if it were not for these interconnections any exudate in a bronchiole would be very difficult to expel by coughing, as the force brought to bear on the exudate must be distal to the plug, and this can be obtained only by reinforcing the column of air by way of interconnections between the tubules in the lobes. The presence of such an exudate in the absence of a mechanism permitting rapid expulsion would be a continual menace to lung function, as absorption of air would quickly result in atelectasis in the lung periphery distal to the plug.

MAYO CLINIC ADVERTISING

For many years we have been hearing reports concerning Mayo Clinic advertising in the lay press, and at various times we have heard prominent physicians and surgeons accuse that enterprise of having a paid press agent who skillfully and adroitly exploits the clinic through lay publications. Occasionally when we have seen some more or less eulogistic article in the lay press concerning The Mayo Clinic we have been half tempted to believe some of the charges that have been made, but upon investigation, and we confess that we have made some investigation, we have learned that instead of seeking publicity The Mayo Clinic has gone to a good deal of trouble and even considerable expense to suppress the efforts of feature writers and others from giving The Clinic publicity that even in its milder form is exceedingly distasteful and objectionable to every member of the organization in question.

The truth of the matter is that The Mayo Clinic has grown to magnificent proportions, and in the favorable estimation of public and profession as well, as a direct result of the high character of work done. It is impossible for any physician or group of physicians to escape a certain amount of publicity, some of which is embarrassing and all of it undesirable, when the character and amount of work done is such as to leave a favorable impress upon profession and public alike. Thus it is that grateful patients in all walks of life have been contributing factors in their several communities in eulogizing and, commercially speaking, advertising The Mayo Clinic in one way or another, and have given publicity through the lay press that The Clinic sponsors know absolutely nothing about and would have done everything possible to prevent had they known about it in advance. Then there have been the feature writers for large newspapers or periodicals, frankly out for gain and receiving their compensation from the publications represented, that have, without either the consent or knowledge of any member of The Mayo Clinic staff, taken occasion to write eulogistic articles concerning the Clinic that, figuratively speaking, have made The Mayo Clinic sponsors boil over with indignation and humiliation. In some instances a knowledge of the intention of some lay periodical to publish an eulogistic article concern-

ing the Clinic has led the sponsors of the Clinic to reimburse the publishers for their expense on the promise that the article never would appear in print. Unfortunately this practice, when information concerning it has reached the unscrupulous, has led to a species of blackmail by those who derive a profit by writing feature articles and who have accepted compensation for suppression of the article.

We hold no brief for The Mayo Clinic, but we do believe in "giving the devil his dues" and in upholding all of those medical men who are following faithfully the ethics and traditions of the medical profession, and after considerable inquiry and investigation we have come to the conclusion that no individual man or body of men in the medical profession has come nearer to upholding all of the cherished principles of our profession than The Mayo Clinic and its staff. On the other hand we have only criticism and condemnation of the medical man who, as a former member of The Mayo Clinic staff, or who has been a student under the Mayo Foundation, or, as more often happens, has been a mere visitor in the Clinic, and then goes home and advertises in the daily newspapers that he has been a member of the staff, or has taken postgraduate courses at The Mayo Clinic. Some of the worst offenders are the physicians who go as visitors to the Clinic, spend a few days looking on, and then return home and advertise that they have received special instruction at The Mayo Clinic, and sometimes go so far as to say in their advertising that because of such instruction they are unusually qualified to serve the public. We have had a number of examples of this sort of personal exploitation at the expense of The Mayo Clinic by Indiana physicians, and quite recently we have received a professional card from an Indiana physician calling attention to service on the staff of The Mayo Clinic, presumably on the theory that he should have preferment because of that service. Not long ago a feature writer for one of our Indiana newspapers took occasion to look up and advertise a few of the Indiana physicians who have received more or less instruction at The Mayo Clinic, or perhaps who were merely visitors in The Mayo Clinic. Some of those Indiana physicians seemingly were quite willing to exploit themselves in the feature article mentioned, and to advertise their offices and equipment, with suggestive illustrations, and offer glowing tributes concerning their skill. The article gave The Mayo Clinic great and justifiable praise, but not a single member of The Mayo Clinic staff knew a thing about the article until after it appeared in print, and very naturally the sponsors of the Clinic were incensed, not only at the feature writer who took advantage of an opportunity, but at the Indiana doctors who overstepped the bounds of ethics and propriety in exploiting themselves at the expense of The Mayo Clinic.

We admit that there is a great deal of objectionable commercialism practiced by certain members of the medical profession, and there are a few, some of whom are relatively prominent in their various communities, who seek every opportunity to keep in the limelight and oftentimes resort to publicity practices that are exceedingly distasteful and obnoxious to their confreres, and not infrequently objectionable to the better class of laymen. We believe that it is time to discipline physicians of that type, no matter what their positions in their several communities may be. We would remind all county medical societies that they owe a duty to themselves and to the profession at large to discipline those of their members who so flagrantly overstep the bounds of ethics and propriety, and in this question of advertising for the purpose of soliciting patrons, we believe that it is time to call a halt. We therefore desire to close this comment by quoting the Principle of Medical Ethics which, concerning the question of advertising, says, "Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever names these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from the legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication of or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards. It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; *or to employ any methods to gain the attention of the public for the purpose of obtaining patients.*"

LOANS FOR MEDICAL EDUCATION

It is said that there is a great deal of money hidden away in safety deposit boxes and in tin cans under the corner of the smokehouse. The government is able to borrow money at rates that are lower than ever before. At the same time there is great need that the money be put into circulation, and there are a lot of boys and girls who have

nothing to do at home and are wondering where they are going to get the money to go ahead with the college education. The problem for medical students is particularly hard for the reason that the course is long, expensive and heavy. There are comparatively few ways that medical students can work outside, and of course they rarely can drop out a year, because in such case they may lose their places and there is little that they can do along medical lines until they have graduated.

Here is an unusual opportunity for the man who has a little money for which, in these troublesome times, he has no safe place for investment. We doubt if there is to be found a safer investment than in education in general and in medical education in particular. A loan at the rate of $500 a year for four or five years, made to an honest and enterprising young man for the purpose of getting or completing a medical education, is a gilt edge investment. The student should be required to take out life insurance covering at least the amount of the loan, but this is no hardship, since he will be getting a very favorable rate and will be starting an estate which later will be of great value to him.

It is quite all right for a student to be compelled to work his way through medical school, but it is much better if he does not have to earn *all* of his expenses. In such a case he is very likely either to injure his health or his education. Five hundred dollars a year will be a tremendous aid to him and will give him more time for the work which evidently is the most important in his career. In these days part-time jobs are hard to get, and it is not unlikely that society would be better cared for if all such jobs were given to persons with families and the students were left free to work on their lessons. Money loaned to a student will serve four purposes at the present time. It will make a safe investment for the man making the loan. It will help some student get an education without being compelled to neglect his studies. It will put the money into circulation and in that way tend to relieve the stagnation that is at the bottom of much of our economic trouble. It will permit persons who might otherwise be dependent to get the jobs which the working student would have had, and in this way this person and his family are to that extent saved from destitution. We can think of no better investment.

MEDICAL INSTRUCTION FOR THE PUBLIC

We cannot quite convince ourselves concerning the choice of subject matter for the instruction of the public in matters pertaining to health and disease. Certainly there is much that the layman should know about himself, and likewise there is a great deal of medical lore that he is better off without. Recently we attended a meeting sponsored by the Hoover Committee for Child Health and Welfare. The distinguished first speaker made it very clear that the dangers of childbirth were higher in this country than in any other—though we doubt it—and at the end of his talk, which was of course delivered to a group of the better sort of laywomen, it would seem that a woman is either a fool, a martyr, or the victim of circumstances when she bears a child. Such a talk would have been all right at a medical meeting, but surely was out of place before those women. The next speaker reviewed the dangers which beset the small child so graphically that one not otherwise well informed would come to the conclusion that there was not much use in having a baby anyway since it probably would not live more than a short time. The third speaker went so into detail in the minutiæ of nutrition that a mother with several children, her housework to do, and but a smattering of technical training would be frightened away from any attempt to feed her children in a way that would bring them the advantages of modern understanding of nutrition.

A year or so ago a bright young woman with a Ph.D. degree in nutrition undertook the all but impossible task of convincing us that every mother should know a great deal about the chemistry of nutrition in order that she might feed her children. She said that a degree such as hers was not absolutely necessary for the modern mother but that it certainly would be a great aid. We were mean enough to remark that women who have Ph.D. degrees do not have children. When we made the remark we little realized how nearly absolutely true it was. Since then we have been able (in our personal acquaintanceship) to recall but one woman with a Ph.D. degree who has a child—and that child is apparently badly malnourished.

What we need in the matter of nutrition—as it pertains to the child in the home—is fewer dietitians and more cooks. We need more plain, wholesome food and fewer fads. We need more peace and less prescription at the dinner table. At school we need intelligent tests much more than we need intelligence tests, though the latter are all right when rationally given and applied.

We are not opposed to lay education, but on the contrary are of the opinion that it is the most important program before the medical profession today. We are merely insisting that it be done in such a way that the public shall not be attempting to play classic music before it has learned its finger exercises. The subject matter of lay education in medical matters is utterly different from the subject matter of medical education. Nothing ever will be able to take the place of common sense in the care of the health of one's self and one's family. The function of the medical profession is to handle the situation so that the layman's common sense is improved by the information we may impart to him. In other words, let us help him to use sense instead of nonsense.

MISLEADING MEDICAL APPROVAL

Radio advertising is getting so rank that it is nauseating to everyone, and we hope that the time soon will come when either radio advertising will be eliminated entirely or it will be discredited thoroughly by the public as much as it deserves to be. It is said that last year five million dollars were spent in advertising Lucky Strike cigarettes, and that much of the basis for the extravagant advertising sponsored by the manufacturers was due to the endorsement of Lucky Strike cigarettes by over twenty thousand physicians. It really sickens us when we think of twenty thousand physicians making blooming pale blue asses of themselves in endorsing *any* cigarette, but during the past few weeks we learn, over the radio as usual, that twelve thousand physicians have exhibited signs of being candidates for the "bug-house" because they think that a certain dental cream is the only thing on the market fit to be used for cleansing the teeth. We have been wondering if these twelve thousand physicians sold their testimony for a tube of tooth-paste, thus putting themselves on a par with the more than twenty thousand physicians who presumably sold an endorsement of Lucky Strike cigarettes for a free carton of that product.

A great many accommodating physicians have recommended certain worthless or near-worthless proprietary remedies, of which Listerine is an example. Through an enormous amount of specious advertising Listerine has gained favorable consideration at the hands of the public which has gained the idea that the product has germicidal properties. A report from the A. M. A. laboratory, published in the *Journal of the A. M. A.*, has the following to say: "Listerine is a proprietary name for a solution of well-known substances which has little bacteriological merit. If a physician desires to prescribe a complex, weakly antiseptic mouth wash, and this is not to be recommended, he has at his disposal the well-known and non-secret Antiseptic Solution N. F. (Liquor Antisepticus). Furthermore, the bacteriologic experiments indicate that Listerine will do little more than a weak-hydroalcoholic solution of thymol. On dilution with four parts of water, Listerine shows no bacteriologic action, according to reports here made."

Most of the proprietary medical journals, and even a few of the official state medical journals, are carrying the advertising of Listerine along with Antiphlogistine and a dozen other more or less worthless proprietary remedies of secret composition. When we are talking about misrepresentation, deception and fraud, it is well for us to take a little inventory of the conduct of many of our medical men and our so-called reputable medical journals. If we expect to retain our self respect and be worthy of membership in an honored profession we ought to avoid furthering misrepresentation and fraud on the part of others. Physicians who are willing to endorse anything and everything, intentionally or unintentionally, are not deserving of being considered as particularly trustworthy in anything, and as much may be said for the medical journal that prostitutes its advertising pages for gain and winks at the misrepresentation and fraud practiced by the advertiser.

REDUCING NURSING EXPENSE

Training schools for nurses are a necessity, but they are an expensive luxury if conducted properly and if the hospital gives its patients the advantage of the services of trained nurses when needed and does not ask patients to pay for specials. When you come down to facts, most of the hospitals have too few well-trained nurses, and depend altogether too much upon student nurses whose services oftentimes are inadequate, poor, and not sufficiently supervised. Some hospitals depend almost entirely on student nurses, and this leads to a good deal of dissatisfaction on the part of many patients who virtually are forced to employ trained nurses at large expense in order to receive the attention that they should receive at the hands of the hospital without any extra charge. A few hospitals go so far as to encourage and even urge all of their patients to employ specials whether needed or not, which in the end leads to a great deal of dissatisfaction because it increases the cost of illness at a time when we are moving heaven and earth to reduce the cost. So far as we know, few if any of the hospitals have adopted the suggestion often made that hospitals ought to adopt the group plan, which consists in assigning a certain number of patients in a restricted area to the care of a graduate nurse, and thus give the patient the advantage of skilled nursing with little or no increase in cost. Many of the hospitals in former years did have competent floor nurses, which furnished a service far superior to that furnished today, and in reality it consisted of having one or more graduate nurses caring for a few patients, with perhaps the assistance of student nurses who learn more and at the same time are far more valuable to the hospital and patients as a result of being under the supervision of a graduate nurse. Certainly there is no getting around the fact that there is a growing dissatisfaction with a good deal of the ordinary hospital nursing as we find it today, and the reason for this is that few hospitals furnish what really can be called adequate hospital floor nursing service, and in consequence a very large number of the patients, if they can afford it, employ special nurses because they really receive or think they receive poor attention at the hands of the student nurses, and probably in many such instances the attending physician gets the reaction of the patient. Oftentimes he does this when the employment of a special nurse means that the patient will be unable to pay the doctor a fair fee for his services. We

believe that if all hospitals would install adequate graduate nurses on all floors it would be possible to do away with about seventy-five to ninety percent of the specials that now clutter up all hospitals and add very materially to the expense of the patient who is ill. We are inclnied to believe that those hospitals would get out more economically if they pursued such a plan than they do now trying to keep up a training school for nurses and depending upon student nurses for a good deal of the service rendered patients. In this respect the small hospital that makes no pretense of establishing and maintaining a training school for nurses has a distinct advantage over the larger hospital, insofar as adequate nursing is concerned. We are strongly of the opinion that no hospital can render the very best service when it uses student nurses to carry the major nursing load for the hospital. Hospital authorities should be impressed with the idea expressed by some of our prominent surgeons that hospital nursing should be so good that only exceptional cases will require specials. This can be brought about only by having one or more graduate nurses on each floor of any hospital, and the number of graduate nurses to each floor will depend entirely upon the size of the hospital. Not only do too many hospitals depend upon student nurses, but they give their student nurses too much to do, and the work is not under enough supervision.

EDITORIAL NOTES

The Indianapolis session was a great success, notwithstanding the fact that there was considerable complaint concerning the program, which latter lacked sufficient variety to interest a large proportion of the membership. It is all right to have an all-Indiana program, but why not give the Sections one-half of the time set apart for scientific papers and discussions, and give the other half to general meetings?

Talking about everything being fish that comes into the net, we are reminded of the physician who, apparently unabashed, said that every case of obstetrics which came to him was a forceps delivery and for the very good reason that forceps delivery cases bring in from twenty-five to fifty dollars more profit and shorten the time for the physician. Well, there is nothing like being honest and giving a logical reason for unbecoming conduct, even for crookedness.

It is worthy of note that Maine has enacted legislation which prevents the practice of medicine by a corporation. The text of the bill says, "No person, firm, organization or corporation shall engage in the practice of any healing art or science to be practiced on the human body, and charge a fee therefor, without having first met the requirements of one of the examining boards designated in chapter 21 of the revised statutes of 1930, and having been legally licensed by one of said boards."

We wonder why the Methodist Church as a great religious and political organization has not suppressed Clarence True Wilson and Bishop Cannon, both of whom are doing more harm than good to the causes for which the Methodist Church is fighting. Wilson has been blackguarding the American Medical Association and medical men in general, and now he is doing the same thing to the American Legion. Fanatics usually resort to vilification and abuse before they get very far along with any crusade, but no one ever wins by such tactics.

There seems to be a very sensible objection to the spending of so much money in entertainment at the annual sessions of our state medical association. The Woman's Auxiliary also shows a tendency toward a little extravagance in entertaining which should be curbed. In reality there is logical reason for the plan of making those who attend our medical sessions pay their own way. Free golf, free luncheons, free musicales, and free entertainment of every kind and description are all very fine for the visitors, but work a hardship upon either the Association or the local medical profession. A resolution introduced at the House of Delegates at the Indianapolis session discouraging expenditures of large sums of money for entertainment was entirely appropriate.

Zo-Ro-Lo apparently is a new proprietary remedy for the treatment of diabetes, arthritis, rheumatism—or what have you? It is surprising how often the agents and canvassers for the remedy learn the names of persons suffering from diabetes and then begin their damnable work of attempting to discredit the use of insulin and the recognized scientific care of the disease by competent physicians. One of the misleading and untrue statements in the advertising is that "Eminent physicians endorse and use in their daily practices this wonderful medicine, Zo-Ro-Lo". Such a claim is preposterous, and there should be some means of preventing these fake remedy manufacturers from making such statements.

We have received a copy of the Connersville *News-Examiner* for Saturday, June 13, 1931, containing a full page advertisement of the Fruth Clinic, an enterprise presumably conducted and managed by Dr. Fruth of Connersville. We also have received several letters from prominent medical men complaining about the propriety of such publicity and asking the opinion of The Journal concerning the same. All we can say is that in our judgment Dr. Fruth is guilty of unethical conduct, and any way that you analyze the thing it is an exhibition of exceedingly bad taste on the

part of a medical man whose confreres have a right to feel chagrined that one of their number has resorted to something that looks very much like commercialism.

WE continue to receive pamphlets and announcements concerning postgraduate courses conducted under the auspices of various state medical associations. We note that these courses are taken right to the doors of the physicians in several populous communities in the states where courses are given. In Indiana we have been wasting a lot of time talking about high-falutin' postgraduate courses and never accomplishing anything of practical value. Why cannot the Indiana State Medical Association in conjunction with the Indiana University School of Medicine give postgraduate courses in the various populous communities of Indiana? We have the teachers, and the physicians want such courses. We rather impatiently are awaiting a satisfactory solution of the question.

WE hope that no medical organizations of any kind whatsoever will give encouragement or support to the Public Health Service, Inc., of Fort Wayne, which, according to its prospectus, is supposed to issue a policy to lay persons guaranteeing the payment of bills for practically all services in connection with illness and disability, not omitting medical and hospital bills. In the first place the company is organized for purely commercial purposes, with capital of insignificant amount, and already has shown its tendency to dictate to members of the medical profession who have rendered professional service to lay persons holding a health policy in the organization in question. As Olin West, secretary of the American Medical Association, has well said, "We need no go-between to interfere with the relationship between the doctor and his patients".

WELFARE organizations of every kind and description are increasing in numbers by leaps and bounds. The fact that some of them over-lap in their work does not seem to be given any serious consideration. An outstanding feature of most of the organizations is that they are well equipped with executives and field officers most of whom are pulling down good salaries. In reality this welfare business is getting to be more like a "racket", and we shall welcome the time when the American people come to the conclusion that there should be some coordination and systematizing of welfare activities. Most of the welfare organizations should be submitted to the pruning shears to cut down some of the salaries, and in not a few instances the expenses of some of the executive field workers could be cut off altogether with profit to all concerned.

HOSPITALS should not be managed wholly and alone by lay persons. Many philanthropists and hospital workers have assumed the attitude that physicians are recipients of favors from hospitals and therefore should not have any voice in the management. They forget that the physicians make the hospital, and without them the hospital necessarily falls, as pointed out by the *Journal of the A. M. A.* in its issue of March 28, 1931. Hospitals should take their medical staff into consultation on every matter concerning the welfare of the institution and be guided by them in their scientific problems. The time will come when the profession and the public will no longer tolerate and support a management which ignores the advice and cooperation of the medical staff and the profession.

A LAY publication of wide circulation carries the announcement of a prominent firm of jewelers to the effect that in keeping with the spirit of the times and the call for a readjustment of prices they are offering bargains in jewelry of unchanged quality, and as examples they describe a pearl necklace which formerly sold for $360,000 but is now selling at $250,000; diamond and emerald ring, former price $85,000, now $65,000; a plain emerald ring, former price $50,000, now $40,000; diamond and emerald bracelet, former price $45,000, now $30,000. The advertising concludes with a statement that these are rare bargains. Now isn't that sweet of them to be so liberal in reductions during these financially hectic times? We have visions of 150,000 doctors and about eight million more or less unemployed people in the United States straining at the leash in order to get a chance at such bargains. The next thing in order is advertising of reduced prices on private yachts and polo ponies!

AT the present time the manufacturers and representatives of the Kalak Water Company are putting forth very strenuous efforts to increase the sales of their product in Indiana. Of course the patient is supposed to take Kalak water regularly every day for the alleged purpose of alkalinizing the system and controlling the various manifestations of acidosis. In this campaign to increase the sale of Kalak Water the physicians are not omitted, and therefore we desire to call the attention of Indiana physicians to the fact that on two different occasions the Council on Pharmacy and Chemistry of the A. M. A. has refused admission of Kalak Water to New and Nonofficial Remedies because of unwarranted claims made for the product. As a mere side issue we desire to call the attention of physicians to a statement made by the Council which declares that a few grams of sodium bicarbonate daily would have a therapeutic value equal to that of Kalak Water, and if a physician desires to secure alkalinity for his patients he certainly does not need any of the expensive mineral waters to produce the desired result.

NO matter what Bernard Shaw and other visionary enthusiasts who have been wined and dined

in Russia may say concerning the success and beauty of the Soviet system, we are not prepared to believe that anyone other than the original down-trodden peasants are satisfied with a system that puts the scientist, the educator, the professional man and those belonging to the so-called intelligent class on the same plane with the lowliest laborer, with practically the same living conditions and comforts. When educated and well-trained physicians, accustomed as they were formerly in Russia, and as they are now in almost every other country in the world, to enjoy some of the comforts and even a few of the luxuries of life, are compelled to work long hours, eat the coarsest kind of food, wear the simplest clothes, live in cramped quarters, and always are at the mercy of the state as to what they will receive as compensation and what their hours of work and recreation shall be, it strikes us that such a life is little better than slavery and offers little incentive for good work and less hope of reward. It seems very evident that most of the rose-tinted stories that come out of Russia have camouflaged conditions purposely, for every now and then the truth from an undisputed source leaks out, and it is not very creditable to the system that now is pursued relentlessly by those at present in control of Russia's destiny.

It is a well-known fact that licensed physicians residing near state lines have had as patients residents of the adjoining state and those patients have felt free to call the family physician across the state line to attend them when needed, and likewise the physician has felt free to render such service. Recently a licensed physician residing in Indiana, three miles from the Illinois line, was arrested and fined one hundred dollars, together with $21.40 court costs, for practicing medicine in Illinois without a license, and the charges were based upon a call upon a regular patient of the Indiana doctor, although the patient lived just across the line. It is possible that this action is a retaliatory measure brought about by jealous or peeved Illinois physicians, but at all events it is very apt to be far-reaching in its effect, and the result eventually will be a good deal of unnecessary ill feeling. No doubt there are many Illinois physicians who have been crossing the state line and seeing patients in Indiana without being molested, and it might be well to remind Illinois authorities that two can play at the same game, although we believe that our Indiana authorities are disposed to be charitable in consideration of a practice that has been going on for many years and without harm. Fortunately the Council of the Illinois State Medical Society recognizes the inconsistency and unfairness of the position taken by Illinois authorities and has very graciously and generously promised to make an endeavor to have the Illinois licensure law modified so that it will correct the discrepancy or do away with the possibility of a repetition of the unpleasantness.

Cheering news comes from Clinton, Indiana, concerning a contract with the township trustee and a group of physicians to treat the indigent sick. A committee of Clinton physicians met with the trustee and his attorney and reached an agreement whereby the twelve physicians of the community agreed to care for the indigent sick on a pay basis. The essence of the agreement is that the trustee agrees to furnish a dispensary room in the county hospital, and to furnish the necessary medicines and a nurse. Each of the signatory physicians agrees to hold a clinic for an hour daily, and as long thereafter as needed to care for the applicants. Five calls are to be made daily free. After the first five the rate is $2.50 per call until nine p. m. After nine p. m. the rate is $4.00, with twenty-five cents a mile for calls out of the city. The pay for the hour's clinic and five calls is ten dollars. Obstetric cases are at a flat rate of twenty dollars each. Major surgery is subject to a special contract between the trustee and the executive committee. There are to be no tonsil cases operated and no venereal diseases treated. The agreement lasts until January 1, 1932, at the end of which time each check is given to the executive committee and the whole amount pro-rated equally among all of the contracting physicians. We congratulate the physicians of Clinton upon a very satisfactory solution of a vexatious problem that is similar to the one that confronts the physicians of every community in the state. The care of the indigent sick is a community problem, and the community should be willing and in Clinton evidently is willing to pay a reasonable amount for the services rendered by physicians. We sincerely hope that other communities will adopt some such plan as that put into effect at Clinton.

Like the Irishman, we are naming no names, but we would like to say that there are a few medical journals representing state medical associations and a considerable number of independent or commercial medical journals that ought to clean house to the extent of clearing out of their advertising pages advertising that is fraudulent, misleading or objectionable from the standpoint of the ethics and traditions of the reputable medical profession. There is absolutely no reason why any medical journal should preach and maintain in its editorial columns a policy that is above criticism insofar as the best interests of the profession are concerned, and then counteract the whole thing by accepting and carrying in their advertising pages a lot of advertising that from the standpoint of decency should be rejected. The practice reminds us of the practice formerly followed by many religious periodicals that in the editorial columns preached about everything that is good and holy but carried in the advertising pages more or less dishonest and misleading advertising. Referring again to the rotten advertising carried by

some medical journals we feel that there is no excuse for a policy of that kind, even though it does bring money into the treasury, for we firmly believe that those very medical journals would find it more profitable, and certainly they would stand higher in the estimation of the medical profession, if they made advertising pages as clean as the editorial pages. Furthermore, we fail to understand why reputable medical men will give either direct or indirect support to medical journals that are prostituting their advertising pages for gain and actually deceiving the credulous in the medical profession. Our criticism is offered in the most friendly spirit, and not because our toes are trampled upon, for we really are interested in having any enterprise represented by the medical profession and intended for the benefit of the profession, no matter what it may be, conducted in such a manner as to command the respect of every right-thinking medical man.

WE have a very high regard for the purposes of the Woman's Auxiliary of the American Medical Association, for primarily that organization is intended to do constructive work in furthering the aims, objects and purposes of organized medicine. The trouble of it is, as stated so frequently by men attending the Philadelphia session of the A. M. A., there are certain localities where the Woman's Auxiliary has resolved itself into more or less of an entertainment society, with pink teas, musicales, and holding of offices as the principal reason for existence. The Auxiliary in Indiana has done some very effective work in promoting health education and curbing medical quackery through its contact with clubs, parent-teacher organizations, etc., but its effect can be still more pronounced if it will work a little harder toward carrying out the constructive program that is before it at the present time. The Auxiliary should see that *Hygeia* is placed in every reading room of schools, libraries, and social rooms of industrial concerns, and in particular the Auxiliary members should see that their own husbands put *Hygeia* on their reception room tables. Then the Auxiliary members of every community should see that quacks, medical pretenders, food faddists and medical propagandists of dangerous type are prevented from getting on programs of any kind. Furthermore, the Auxiliary members could take an interest in preventing the teachers in our public schools from proselyting in the interests of cultists of any kind, and a united force and united effort should be put forth to prevent unfair and dangerous meddling in the private practice of medicine by welfare workers. The Auxiliary also can be of inestimable value to the medical profession and the public as well in promulgating in the lay press of right teaching and right practices as pertains to disease prevention and cure. Any Auxiliary should be ashamed of its existence if it exists on paper only or if it considers its principal function and work is to resolve itself into an adulation society and have as its principal avocation the giving of pink teas, card parties, musicales, and other forms of entertainment.

What the Doctors Are up Against. Members of the medical profession resident in Detroit go about their duties these days with scrambled emotions. Most of them have plenty to do, but, in amazing proportion, their efforts are devoid of financial return.

The trouble is clinics. Free clinics! Clinics that welcome the sick, treat them without money and without price, and accord them every care and attention that paying patients can possibly command!

The disciples of Aesculapius cherish certain fine, ethical traditions. As old as medicine itself is the fixed custom of turning no sick person away because of inability to pay for medical skill. On this tradition Detroit physicians founded these very clinics. But now selfish persons in huge numbers are abusing clinic facilities. Patients far wealthier than the doctors themselves march up to the desk, sign a certificate of destitution and get free treatment without stint. One physician remarks that his whole practice has gone clinic. He knows, because he himself treats them on his clinic days. Another found himself about to remove a pair of tonsils that looked strangely familiar. They turned out to be those of his landlord's daughter, a former pay patient. The old man owned a solid block of apartments. He had signed the statement of destitution without a qualm.

The physicians agree that something must soon be done about this frankenstein of theirs. It is running away with their bread and butter. Ethics are fine but inedible, they justly maintain.

To install more stringent formalities at the clinic gate seems a logical step. An affidavit of destitution might be more of a safeguard than the present unattested statement. In cases of flagrant abuse, the affidavit might also allow of a perjury charge and an example. Some such step would have been taken long ago were free clinics an adjunct of any business enterprise. The doctors, however, shrink from that. They are waiting to be driven. Such an eventuality may not be far off.—*Saturaay Night* (Detroit). Reprinted from *Bulletin of the American Medical Association* for June, 1931.

MANY years ago an old physician of our acquaintance who was careless and indifferent about his business affairs, and neglected to keep up his own credit, decided that he would build a barn, and without any paricular plans or specifications called a leading contractor to undertake the project. While the building was in course of erection the contractor's son sustained a simple fracture of the arm, and the old doctor was called upon to render the necessary professional service, which, owing to the nature of the case, was not

at all exacting or complicated. In due course of time the barn was finished, but the old doctor ignored any and all statements received which showed that he owed about fifteen hundred dollars for the barn, including labor and materials. Finally the contractor made a personal request for payment. "Oh, that's all right," said the doctor, "just receipt the bill." The contractor, thinking that he was about to receive a check, handed over the receipted bill with the remark that his own bill for professional services rendered his son could be deducted. Whereupon the old doctor said, "Well, that's all right, here is the receipted bill for my professional services, and the one will balance the other."

We had supposed that such instances were of the long ago, but recently we heard of a similar case in which a physician attempted to pay for his automobile by giving a receipted bill for some trivial medical and surgical service, but the automobile dealer balked when it came to completing the transaction, and sued for possession of the automobile. The question now arises as to whether or not the physician will sue for the amount due him, and if so what valuation he will place upon his services. We can remember when a doctor traded out the amount of his bill with the butcher, the baker and the candlestick maker, and we also can remember when the editor's father, a physician, never paid any actual money for keeping his horses shod throughout the year, as the blacksmith with his brood of youngsters and their usual ills always owed a doctor bill large enough to cover any expense of horseshoeing. Nowadays no one thinks about exchange of services or exchange of bills. We all are independent, dispose patronage where we like, and pay for it in real money, if we can, or avoid payment altogether as is the case with some patients who could pay for services or goods if forced. Anyway, this exchange of accounts is not very satisfactory and usually ends in misunderstandings and oftentimes ill will.

During the early part of the season the price of crude oil went down to ten cents a barrel and physicians and others who drive automobiles would like to know why they are paying so much for gasoline and why with a falling market for crude oil and general reduction of all wages and practically all commodities it was necessary the last week in August to advance the price of gasoline by three cents per gallon. As a mere side issue the smokers would like to know why the price of cigarettes has been advanced during the last few months despite the fact that production costs are said to be much lower. It also seems strange that in a land of plenty, or over-production as we say, there should be so many going without food and clothing. There always has been too much of a difference between what the producer receives and what the consumer pays. A great deal of justifiable complaint has been made in the past concerning arbitrary action on the part of organized labor, but what organized labor has done to industry in an arbitrary manner cannot be compared in the same breath with what organized capital has done to manipulate enterprise so that the average man is at the mercy of conditions artificially produced. We are not bolshevists, but we do believe that some plan should be proposed and adopted whereby there will not be such an enormous difference in the returns from labor of the various kinds which make up the world's work. Billionaires and multi-millionaires, figuratively speaking made over night, are not good for any country, and the fact that our system permits such inequality of returns from effort does not have a wholesome effect upon millions of people who use their hands and brains to the fullest extent and yet obtain in return only the bare necessities of life. Physicians, like welfare workers, come in contact with the sordidness of life, the poverty and distress, and learn to have a wholesome respect for the great middle class who appreciate what is done for them and show willingness to pay reasonably for the service, whereas many of the wealthy have a distinct tendency to show no appreciation for services and not infrequently exhibit open rebellion when asked to pay even reasonably for services. The present depression, which seems more or less world wide, is bound to bring about very radical economic changes, and it will require sober-minded and analytical consideration of conditions if we are to avoid blundering into an era of radicalism that would be the undoing of all of us. We believe that sound judgment will prevail, but in the final settlement of our problems some enormously wealthy people are going to feel that they have been hurt—and they deserve to be hurt!

MEDICO-LEGAL DEPARTMENT

Albert Stump
attorney for the
Indiana State Medical Association

Question: What is the law concerning medical and surgical relief for the poor?

Answer: The township trustee is made the overseer of the poor within the township and as such it is his duty to "have the oversight and care of all poor persons in his township so long as they remain in charge, and shall see that they are properly relieved and taken care of in the manner required by law. He shall, in cases of necessity, promptly provide medical and surgical attendance for all of the poor in his township who are not provided for in public institutions; and shall also see that such medicines as are prescribed by the physician or surgeon in attendance upon the poor are properly furnished." (Burns 1926, Section 12260.)

This obligation to care for those who are in the township is limited to those who under the law

have a legal settlement in the township. One obtains legal settlement by residing in the township for one whole year without interruption; and once a settlement is obtained in a township it continues until a new settlement is acquired in another township. (Burns 1926, Section 12259.)

Where a situation develops requiring immediate temporary aid the overseer "shall furnish to them such temporary aid as may be necessary for the relief of immediate and pressing suffering". (Burns 1926, Section 12262.) Under this provision of the statute township trustees may pay for medical service for an emergency case for one who does not have a settlement within the township.

The amount of relief which may be given without any approval on the part of the County Commissioners is limited to $15.00 for all relief other than "burial, medical relief, or assistance to children under the compulsory educational law". (Burns 1926, Section 12266.) If more relief is necessary a schedule must be presented, containing certain facts as required by the law, to the County Commissioners, who may authorize the overseer to give further aid. The amount of relief which may be provided for burial, medical relief or assistance to the children under the compulsory educational law is not limited to any specific amount in the statute. The amount of the medical relief is not subject to review by the Board of County Commissioners, although the County Council appropriates and the Board of Commissioners advances to the township trustee the money necessary for the relief of the poor. (Burns 1926, Section 12258.)

The County Council cannot control the amount of medical relief by the amount of the appropriation they may make, nor can the Board of Commissioners control it by the amount which they authorize to be advanced to the township trustee. The intention of the Legislature that these two Boards should not necessarily control the actions of the trustee for the relief of the poor is made clear in the Acts of 1931, page 188, which authorizes the Board of Commissioners to borrow money to pay claims incurred and filed with the Board of Trustees for relief of the poor in excess of the amounts which can reasonably be advanced out of the general fund of the county for such purposes. The county is reimbursed for such loans by the township for whose benefit the loan was obtained. If it were the intention of the Legislature that the amount to which the township could be made liable would be determined by the appropriation of the County Council and the advancement of the County Commissioners, then no valid claim beyond that amount could be incurred. But the 1931 Act provides for the payment of claims in excess thereof, and therefore such claims in excess thereof must be regarded as valid. This leaves the township trustee in the situation where all reasonable contracts made by him for the care of the poor will be held valid and enforcible contracts.

When the township trustee employs the physician to render medical relief to the poor, if there is no definite contract for the amount which he is to pay, then impliedly, the contract is to pay for a reasonable fee for the services to be rendered. If a well-known custom exists as to what is considered a reasonable fee then the contract is made with reference to that customary fee. Whether upon the basis of an implied contract or upon the basis of an express contract with reference to the fee, the contract is nevertheless binding and the fact that the amount of the aid extended under the contract would be more than the amount allowed by the County Commissioners would not defeat the recovery of the full amount of the fee contracted for either expressly or impliedly.

Under ordinary circumstances the physician could recover for his services only upon a contract having been made for those services with the trustee in advance of the rendering of the services. That does not mean that there should be any formal documents drawn up as a contract. Merely the request by the trustee for the services would be sufficient to create a contract. But if the services are rendered not upon the request of the trustee, then the situation would be somewhat different.

Under that situation the physician can recover for services rendered where an emergency exists and an immediate communication cannot be had with the township trustee. The statute governing the oversight of the poor by the trustee was construed in that regard in the case of Newcomer vs. Jefferson Township, 181 Ind. 1. The facts in that case briefly were these: A boy riding on a freight train fell off and under the train and his right leg was crushed off and he received other injuries. The family of the boy were destitute. The physician was brought in a few moments after the injury. Immediate amputation was necessary. It was ten miles to the office of the trustee and there was no telephone nor any means of reaching him except by horse and buggy. If immediate relief were not given death was inevitable. In this emergency the doctors performed the operation, stayed with the boy during the night, administered the relief necessary under the circumstances, cared for the case and presented their bill to the township. The court held the township liable, using this language in the course of its opinion: "The law is just as mandatory that the relief shall be given at the expense of the township as it is that the overseer shall provide it. It is therefore the law's mandate in such an emergency as is here shown, which raises an implied liability to one who renders such necessary and prompt service as is here shown, for the reasonable value of the service. It is not a voluntary service, but an obligation imposed by law."

Under the force of that construction of the statute the township trustee would be liable for the payment of a hospital bill and operating fee

in an emergency operation where the patient is unable to pay, even though the township trustee did not definitely contract for the services.

Where, however, the emergency is not such that the trustee cannot be communicated with, the trustee has the power and duty to make the contract and services rendered in the absence of an emergency without any contract would not make the township liable.

The form of contract which the trustee may make is not definitely limited in the statute. It prescribes only the duty and obligation to provide medical and surgical relief.

DEATH NOTES

J. A. Sims, M.D., of Pine Village, died August 25th, aged eighty-one years. Dr. Sims graduated from the Medical College of Indiana, Indianapolis, in 1879.

W. B. Sprinkle, M.D., of Oaktown, died September 1st, aged seventy-nine years. Dr. Sprinkle graduated from the Louisville Medical College, in 1876.

J. F. Noland, M.D., of Logansport, died August 25th, aged seventy-two years. Dr. Noland graduated from the Kentucky School of Medicine, Louisville, in 1886.

Samuel Harrell, M.D., of Noblesville, died September 8th, aged sixty-two years. Dr. Harrell graduated from the University of Michigan Homeopathic Medical School, Ann Arbor, in 1893.

Edward A. Pape, M.D., of Indianapolis, died September 7th, while visiting relatives in Chillicothe, Illinois. Dr. Pape was fifty years of age. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the State College of Physicians and Surgeons, Indianapolis, in 1907.

Harry Elliott, M.D., of Brazil, died September 24th, aged fifty-two years, following an illness of almost a year.

Dr. Elliott was born in Indiana, received his early education in the public schools of Poland, Indiana, and taught in the Clay county schools. He attended Indiana University and the Medical College of Indiana, Indianapolis, from which he graduated in 1904.

Dr. Elliott was active in medical affairs. He was a member of the Clay County Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association, and a Fellow of the American College of Surgeons. He had served as secretary of the county board of health and the city board of health (Brazil). He was a captain in the medical corps during the World War, serving at Base Hospital No. 109 at Vichy, France, for nine months.

NEWS NOTES AND PERSONALS

The State Conference on Social Work was held at Bloomington, October 10th to 13th.

Dr. George A. May has located at Madison, Indiana, where he will conduct a general practice.

The Mississippi Valley Conference on Tuberculosis will meet in Indianapolis in September, 1932.

Dr. W. E. Schoolfield has opened his office for the general practice of medicine in Orleans, Indiana.

Dr. A. M. Hetherington, of Indianapolis, recently completed a postgraduate course in surgery in Chicago.

Dr. John T. Emhardt, of Indianapolis, and Miss Emma Brinkman, of Indianapolis, were married September 6th.

The editor of The Journal and his wife took their customary two-week fishing trip in Canada the first two weeks of October.

Dr. Martin F. Patton, of Indianapolis, and Miss Alice Catherine Mersdorff, of Madison and Indianapolis, were married August 25th.

Governor Leslie appointed Dr. A. C. Arnett, of Lafayette, to represent Indiana at the American Legion unemployment conference in Washington.

The summer guest meeting of the Northeastern Indiana Academy of Medicine was held at Potawatomi Inn, Pokagon State Park, September 16th.

Dr. John B. Deaver, noted Philadelphia surgeon, died September 25th at his home at Wynecote, near Philadelphia. He had been ill for some time.

Dr. R. G. Leland, of Chicago, presented a paper on "Medical Economics" before the September 1st meeting of the Fort Wayne Medical Society.

Dr. Edward H. Cary, president-elect of the American Medical Association, was the house guest of Dr. and Mrs. Albert E. Bulson, Fort Wayne, the last week in September.

Dr. Joseph E. Clevenger, of Muncie, was the principal speaker at the first fall meeting of the

Delaware-Blackford County Medical Society held at the Hotel Roberts, Muncie, September 15th.

DR. F. H. RILEY, of Jamestown, and Miss Ruth Hill, of Carthage, were married September 9th in Peoria, Illinois. Dr. and Mrs. Riley will be at home in Jamestown, Indiana, after November 15th.

DR. AND MRS. NORMAN REGLEIN, who have been in Europe for the past five months, where Dr. Reglein has been studying, have returned to Michigan City, where he will begin practicing this fall.

DR. J. W. HILL, of South Bend, celebrated his seventy-third birthday, September 6th, by holding an informal reception for his friends at his home. Dr. Hill has practiced medicine in South Bend for fifty years.

AT the September 10th meeting of the Tippecanoe County Medical Society, held in Lafayette, Dr. Max A. Bahr, of Indianapolis, presented a paper on "Psychoanalysis with Report of a Case of Hysteria".

EDWIN N. KIME, M.D., of Indianapolis, has been made a member of the medical advisory committee of the Washington National Research Foundation, which is carrying on a series of scientific experiments.

DR. A. M. MENDENHALL, M.D., of Indianapolis, addressed the Central Tri-State Medical Society (Ohio, Kentucky and West Virginia) at Portsmouth, Ohio, September 17th. His subject was "Newer Things in Obstetrics".

DR. MELVILLE ROSS, of Bloomington, and Miss Irene VanLaningham, of Indianapolis, were married in Indianapolis, September 15th. Dr. and Mrs. Ross will be at home in Bloomington after the middle of October.

THE Terre Haute Academy of Medicine met at the Elks' Club, Terre Haute, October 2nd. Dinner was served at 6:30, following which Dr. B. R. Kirklin, of The Mayo Clinic, talked on "Diagnosis of the More Common Pulmonary Lesions".

SEVENTY physicians attended the meeting of the Elkhart County Medical Society held September 3rd at the Hotel Elkhart. The principal address was presented by Dr. Herman L. Kretschner, president of the Chicago Medical Society.

DR. WILLIS D. GATCH, of Indianapolis, has taken over the duties of acting dean of the Indiana University School of Medicine for the year 1931-32, during the absence of Dr. Charles P. Emerson, who is abroad on a leave of absence for a year.

THE Tippecanoe County Medical Society held a dinner meeting at Lincoln Lodge, October 8th. A clinic was held at St. Elizabeth's Hospital, Lafayette, at 4:30 p. m. Dr. M. H. Fischer, of Cincinnati, presented a paper on "How to Find the Patient".

DR. AND MRS. A. M. MENDENHALL have recently returned from a week at White Sulphur Springs, West Virginia, where Dr. Mendenhall attended the annual meeting of the American Society of Obstetricians, Gynecologists and Abdominal Surgeons.

MRS. L. E. FRITSCH, of Evansville, was elected president of the Woman's Auxiliary to the Indiana State Medical Association at the Indianapolis session. Mrs. O. O. Alexander, of Terre Haute, was made president-elect, Mrs. J. C. Armington secretary, and Mrs. C. F. Voyles, Indianapolis, treasures.

THE American College of Physicians will hold its sixteenth annual clinical session at San Francisco, with headquarters at the Palace Hotel, April 4-8, 1932. Early announcement of dates has been made primarily to prevent conflicting dates with other societies that now are arranging their 1932 meetings.

AN offer of the Flower Mission Society, of Indianapolis, to build a $50,000 unit for indigent tuberculosis patients in the City Hospital, Indianapolis, recently was rejected by the Board of Public Health of that city for the reason that the finances of the City Health Department will not permit maintenance of such a unit at this time.

THE Terre Haute Academy of Medicine inaugurated its eleventh year of service by providing postgraduate instruction by leading men in North America. The September 4th meeting was held at the Elks' Club, Terre Haute, with dinner at 6:00 p. m. Dr. J. S. McLester, of Birmingham, Alabama, presented a paper on "Protein Requirement".

THE Lawrence County Medical Society held its regular monthly meeting at the Bedford Country Club, September 2nd. A fried chicken dinner was served at noon, and the afternoon was devoted to a symposium on public health. The Lawrence County Auxiliary served a picnic lunch in the evening at the home of Dr. and Mrs. McFarlin at Williams.

THE U. S. Civil Service Commission announces open competitive examination for social service worker (Prisons Bureau). Applications for this position must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than October 22, 1931. Examination is to fill a vacancy in the position of junior warden's assistant, Federal Industrial Institution for

Women, Alderson, West Virginia, and vacancies requiring similar qualifications throughout the United States.

Plans for construction of a building for a medical and pharmaceutical research laboratories have been announced by J. K. Lilly, president of Eli Lilly & Company. It has been estimated that the project will cost about one million dollars. A feature of the structure will be a complete scientific library, which will occupy the entire top floor of the building. The structure will have four stories, and will be 222 feet by 50 feet. An auxiliary building, 84 feet by 50 feet, will be constructed in the rear.

The Eleventh Indiana District Medical Association will hold a meeting at Peru, October 15th. There will be a clinic in the forenoon and a scientific program in the afternoon, followed by a banquet in the evening. A representative of the surgical department of The Mayo Clinic will present a paper on modern surgery. Dr. Louis H. Segar, of Indianapolis, will discuss a subject related to children's diseases, and Drs. Rhamy, of Wabash, and Schuler, of Kokomo, will discuss the present status of the treatment of hay fever.

The United States Civil Service Commission announces open competitive examinations for physiotherapy aide, psysiotherapy assistant, applications for which positions must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than October 29, 1931. Competitors will be rated on answers to practical questions concerning the duties of the position, and on their education, training, and experience. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

The thirty-seventh annual conference of county, city and town health officers of Indiana was held at the Claypool Hotel, September 22nd and 23rd. Speakers included Governor Harry G. Leslie, Dr. J. V. Pace, superintendent of the State Sanitarium at Rockville; Dr. F. W. Crockett, president-elect of the Indiana State Medical Association; Dr. R. C. Williams, assistant surgeon-general of the U. S. Public Health Service; Dr. J. H. Shaughnessy, of the Illinois State Board of Health, and Dr. O. B. Nesbit, medical inspector of the Gary public schools.

Dr. Burt R. Shurly, of Detroit, was elected president of the American Academy of Ophthalmology and Otolaryngology for 1933 at the recent French Lick session. Dr. S. Hanford McKee, of Montreal, was elected last year for president in 1932, and the convention next year will be held in Montreal, Canada. Dr. Gordon New, of Rochester, Minnesota, was made first vice-president; Dr. William Large, of Cleveland, Ohio, re-elected controller; and Dr. W. P. Wherry, of Omaha, Nebraska, re-elected executive secretary and treasurer, which position he has held for the past ten years.

One of the principal speakers at the annual convention of the Indiana Federation of Clubs to be held at West Baden, October 22, will be John Ihlder, executive director of the Massachusetts Housing Association, and representative of the President's White House Committee on Housing. Mr. Ihlder has been invited by the Indiana Federation of Clubs to present the newest ideas in the present day housing laws in order that the Federation may have information upon which to offer amendments to the present Indiana housing laws if such is deemed necessary. All members of the Indiana State Medical Association are invited to hear Mr. Ihlder.

The United States Civil Service Commission announces open competitive examination for pharmacologist, applications for which position must be on file with the United States Civil Service Commission at Washington, D. C., not later than November 3, 1931. The examination is to fill a vacancy in the National Institute of Health, Public Health Service, Washington, D. C., and vacancies occurring in positions requiring similar qualifications, for duty in Washington, D. C., and in the field. The entrance salary is $4,000 a year. Competitors will be rated on their education and experience, and on a thesis or published writings. Full information may be obtained from the United States Civil Service Commission, Washington, D. C.

The American Association for the Study of Goiter is giving publicity to its approval of the following classification and nomenclature:

Clinical Classification:

Type 1—Non-toxic Diffuse Goiter.
Type 2—Toxic Diffuse Goiter.
Type 3—Non-toxic Nodular Goiter.
Type 4—Toxic Nodular Goiter.

Nomenclature:

The association advocates a policy of using the simplest and yet the most descriptive terminology possible.

The use of proper names, while it is impossible to dispense with many well-established ones in goiter literature, is discouraged, as should be coined words invented to popularize a fad or fancy.

Emphasis should be made upon the importance of not confounding varieties and sequelæ with types. The use of such terms as exophthalmic, hemorrhagic, cystic, adolescent, colloid, intra-thoracic, substernal and congenital are perfectly proper when used to describe varieties, but only constant characteristics should be used to designate types.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Sandoz Chemical Works, Inc.:
Gynergen Solution 0.1 percent.
E. R. Squibb & Sons:
Squibb Chocolate Vitavose.
Winthrop Chemical Co., Inc.:
Skiodan.

INDIANA UNIVERSITY NEWS NOTES

Dr. Richard Woltereck, eminent German biologist, will give three lectures at Indiana University October 12-14th during his tour of this country. Dr. Woltereck is an instructor in the University of Leipsic, third largest university in Germany.

Dr. Charles P. Emerson, dean of the Indiana University School of Medicine, is to spend the coming year in Asia as a member of a commission for the investigation of medical missions. Upon the recommendation of Dean Emerson, Dr. Willis D. Gatch, professor of surgery at the I. U. Medical School, has been appointed acting dean. Dr. Emerson's leave of absence began on September 1st, and Dr. Gatch has already taken over the work.

General plans for erection of an "oxygen cabinet" in the James Whitcomb Riley Hospital for Children, with provision for at least eight patients, have been approved by the grand council of the Psi Iota Xi sorority, which recently appropriated $7,500 from funds of the organization with which to provide the hospital with the needed equipment. The plans were presented by Dean W. D. Gatch and Dr. H. M. Trusler, of the I. U. School of Medicine, and James W. Carr, executive secretary of the Riley Memorial Association. The medical school men have explained that the oxygen cabinet is needed in the hospital and will be used in treatment of many types of illnesses where suffocation is to be overcome.

Announcement has been made of the establishment of the Herman H. Young Foundation for research in clinical psychology at 1119 North Delaware Street, Indianapolis. Dr. Young was professor of psychology at Indiana University and director of the psychological clinics at Bloomington and at the I. U. medical center, Indianapolis, until his death last year. The Foundation is an organization developed to carry on the great work of Dr. Young. It will be directed by Dr. Mary H. Young, wife of the late Professor Young, who has been prominent in psychological work for some years. On the death of her husband, Mrs. Young was appointed acting director of the psychological clinics at the Indiana University campus at Bloomington and at the medical center and hospitals, Indianapolis, and recently has accepted an appointment to a professorship in clinical psychology in Indiana University.

In spite of the economic depression, Indiana University's enrollment this semester will exceed that for the first semester of last year, according to present figures. At the present time more students have enrolled in the University's divisions at Bloomington than were enrolled at the corresponding time last year, according to University officials. The combined enrollment of the University's divisions at Bloomington and Indianapolis will be in the neighborhood of 4,250. The enrollment for Bloomington will in all probability reach 3,550, with approximately 700 students registering for medical, dental, nurses' training, and social service work at Indianapolis. This figure of 4,250 does not include any form of extension. Extension class enrollments last year in Indianapolis alone were 2,000 and the total for the state was more than 5,000. Prospects for extension class enrollments are excellent, with indications that residence and extension enrollment of I. U. for the year will exceed 10,000 students.

Twenty-two hundred and eight patients were cared for during August by the three Indiana University hospitals at Indianapolis, according to the records of Dr. E. T. Thompson, administrator of the I. U. medical school and hospitals. Eight hundred and thirty of these were bed patients while the remaining 1,378 were out-patients. A total of 1,810 patients were taken care of by the I. U. hospitals during August of last year.

The James Whitcomb Riley Hospital for Children heads the list with 1,166 patients for August of this year. Four hundred and eighteen were bed patients and 748 out-patients. The William H. Coleman Hospital for Women came second with 553 patients, 250 bed patients and 303 out-patients. The third hospital, the Robert W. Long Hospital, served 489 patients. One hundred and sixty-two were bed patients and 327 out-patients.

The combined patient daily average for the three I. U. hospitals for August of this year was 304.39 as compared to 301.34 for last August.

DIPHTHERIA DEATHS IN INDIANA

(Continued from page 554)

go up. Doctors say that they are not called until the case is already well developed. In such case we understand that the result is liable to be disastrous. Just the same, they should report it as diphtheria when they are called or if a child dies without a doctor, the health officer should report it. A case of diphtheria is a serious matter and the rights of the remainder of the community require that the law shall be obeyed and the case reported to the proper authorities.

Following are the deaths for 1931:

County	Total for August 1931	August 1931	County	Total for August 1931	August 1931
Allen	2	0	LaGrange	1	0
Bartholomew	1	0	Lake	5	0

Brown	1	0	Laporte	1	0
Carroll	1	0	Lawrence	2	0
Clark	2	0	Madison	6	1
Crawford	2	2	Marion	2	1
Dearborn	2	0	Marshall	1	0
Delaware	3	0	Martin	2	0
Fayette	2	0	Montgomery	1	0
Franklin	2	0	Newton	1	0
Gibson	1	0	Orange	1	0
Grant	2	0	Perry	2	0
Greene	1	0	Ripley	3	0
Hamilton	1	0	Starke	1	0
Hendricks	1	0	Sullivan	1	0
Henry	2	0	Vanderburgh	1	0
Howard	2	0	Vigo	1	0
Huntington	2	0	Whitley	1	0
Knox	1	1			
			Totals	64	5

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION INDIANAPOLIS SESSION 1931

THE COUNCIL

FIRST MEETING

(Indianapolis Session, September, 1931)

The first meeting of the Council of the Indiana State Medical Association was a luncheon meeting in the Empire Room of the Claypool Hotel, Indianapolis, convening at twelve-thirty with the chairman, Dr. E. E. Padgett, presiding.

Roll-call showed the following Councilors and officers present:

1st District—John H. Hare, Evansville
2nd District—H. C. Wadsworth, Washington
3rd District—Walter Leach, New Albany
4th District—H. P. Graessle, Seymour
5th District—O. O. Alexander, Terre Haute
6th District—B. G. Keeney, Shelbyville
7th District—E. E. Padgett, Indianapolis
8th District—M. A. Austin, Anderson
9th District—F. T. Romberger, Lafayette
10th District—E. M. Shanklin, Hammond
11th District—E. O. Harrold, Marion
12th District—E. M. Van Buskirk, Fort Wayne
13th District—J. B. Rogers, Michigan City

OFFICERS:

A. B. Graham, President.
F. S. Crockett, President-elect.
Wm. A. Doeppers, Treasurer.
A. E. Bulson, Editor, THE JOURNAL.

MEMBERS OF THE EXECUTIVE COMMITTEE:

Wm. H. Kennedy, acting Chairman.
Thomas A. Hendricks, Executive Secretary.

COUNCILORS-ELECT:

Sixth District—Samuel Kennedy.

The reading of the minutes of the mid-winter meeting was dispensed with since these minutes had appeared in THE JOURNAL.

Councilor District reports were accepted as printed in THE JOURNAL.

Dr. M. A. Austin announced that Anderson would not be able to extend an invitation to meet there, as had been expected in 1930, since a hotel in the course of erection would not be finished.

Conflict in District Meetings:

T. A. HENDRICKS: This year we had many serious conflicts in district meetings. If, through the Councilor, the dates of the district meetings could be sent to headquarters, I believe we could avoid many of these conflicts. If the Councilor in each district will take the responsibility of sending us the dates of the meeting, we can then get the material together and keep the Association informed as to the dates of the meetings, and perhaps straighten out some conflicts.

F. S. CROCKETT, M.D.: Next year being my year I would like to visit every district meeting. I know Dr. Graham had considerable trouble with conflicts this year. I have no suggestion to make for I know how hard it is to get anything done.

THE PRESIDENT: I have no suggestions, but I think it is up to the Councilor to arrange for it.

A. E. BULSON, M.D.: It does not seem to me that we can dictate to the Councilor societies, but it occurs to me that the executive secretary could write to the officers of the Councilor District societies and tell them it is a serious matter, and see if they will not cooperate in arranging dates that will not conflict. I believe with a little bit of cooperation on the part of the societies and tact on our part the matter can be straightened out. The district societies do not want to be dictated to, but I think if it is put up to them in a tactful manner—that the officers would like to visit all the societies—they would be willing to waive their right to the date selected if necessary.

T. A. HENDRICKS: Do you think it might be well, as we get the information at headquarters office, to put it in such form that it could be printed in THE JOURNAL, as we do the dates of the county societies.

THE CHAIRMAN: It seems that we are not in position to take any official action. All we can do is to recommend that each Councilor cooperate with Mr. Hendricks' office in trying to keep the Councilor District meetings from conflicting with each other.

B. G. KEENEY, M.D.: The district meetings are arranged by the president of that particular district. It seems to me the Councilor should function actively early in the year and get in touch with the president of that district and arrange a satisfactory date.

I move that each councilor early in the year get in contact with the president of his district society, find the date of the meeting, and report it to headquarters office, and if it conflicts there will be opportunity to change it. (Motion seconded by Dr. Bulson and carried.)

Election of Successor for Dr. Ross, Former Chairman of Executive Committee: Moved by Dr. John H. Hare that Dr. H. H. Wheeler, of Indianapolis, be elected to take the place of Dr. Ross. Motion seconded and carried.

Application for Charter of Marshall County Medical Society: Dr. J. B. Rogers reported that this society had organized and elected officers, with Dr. Harry Knott president. Moved by Dr. Bulson that the Council grant a charter and execute it in due form to this society. Motion seconded and carried.

Membership Desk Cards:

T. A. HENDRICKS: For several years some members of the Association have thought it might be well to have something whereby they could place upon their desks the fact that they are members of the Indiana State Medical Association. The Executive Committee had presented before it a desk card that could be put on the physician's desk, with some such lettering as this: "Member Indiana State Medical Association"—with the current date. The Executive Committee considered this matter but did not think they had the right to expend money for anything of this kind until it had been approved by Council. The cost is something like thirty cents apiece.

After some discussion it was moved by Dr. Walter Leach, seconded by Dr. Keeney, that each individual deal with this matter as he may choose. Motion carried.

Report on Dr. ———'s Case by Dr. O. O. Alexander:

DR. ALEXANDER: This is quite a long affair and rather far-reaching. Our executive secretary has handled the case in a wonderful manner, so I do not believe, unless the Council would like to hear about it, that I will make any report. It is being taken care of very nicely.

THE CHAIRMAN: Just state the case.

DR. ALEXANDER: Some time during the summer a physician of West Terre Haute was arrested in Illinois and taken before the circuit judge and fined $100 and costs for practicing in Illinois without a license. The costs amounted to about $21.40. The physician is a reputable member of the Vigo County Medical Society, maintaining his office in West Terre Haute about three miles from the Illinois border. For years the physicians along the border have practiced occasionally in Illinois.

We have patients from Illinois in our offices occasionally and make calls in Illinois—and they cross the horder too. I had supposed there was some sort of gentleman's agreement to take care of this matter. When the physician was arrested I wrote to Mr. Hendricks and suggested that he take it up with the Executive Committee, and possihly with the Executive Committee of the A. M. A., and also with the Indiana State Board of Medical Registration. They found out that apparently the Indiana law takes care of the borderline practitioner from other states. That is, a man can maintain an office in Illinois and practice over the line in Indiana. The Illinois law, on the other hand, does not take care of that; a man cannot practice in Illinois without a license. Mr. Hendricks has taken it up with the Council of the Illinois State Medical Association, and they promise some legislation to correct it. He has also taken it up with Mr. Woodward, of the A. M. A., and he promised to take some action in case Illinois and Indiana cannot get together.

Mr. Hendricks read a letter from Dr. H. M. Camp, secretary of the Illinois State Medical Association, showing that they were willing to cooperate to the fullest extent in this matter.

No official action was taken.

Burkhardt Case: Dr. F. T. Romberger stated that this case had been settled amicably. No further report.

Resolution Presented by Dr. Davidson:

"WHEREAS, The Legislature of 1931 will be required to change the congressional districts of the state in accordance with the Act of Congress of the United States;

"BE IT RESOLVED, by the House of Delegates of this Association, That the councilor districts as at present constituted shall be unchanged."

As this had been approved by the Council at the mid-winter meeting, no further action was taken.

Appointment of Special Committee to Change the Constitution and By-Laws to Provide for the Annual Election of a Speaker and Vice-speaker of the House of Delegates and Devise Ways and Means of Simplifying Roll-call of the House of Delegates.

DR. E. M. SHANKLIN: Since the report of the committee has been sent in and published in the Hand-book on pages 24-25, I move the adoption of the report of the committee. (Motion seconded by Dr. Romberger and carried.)

Correspondence with Tuberculosis Association in Regard to Requiring Each Person Applying for an Examination in a Tuberculosis Clinic to Come with a Written Request from a Physician for Such Examination.

T. A. HENDRICKS: In accordance with the action taken at the mid-winter meeting of the Council, the Executive Committee authorized a letter, which was sent to the National Tuberculosis Association. Answering the letter they state that the National Tuberculosis Association does not conduct clinics; that these are held by the county tuberculosis associations as part of their respective programs; that the state tuberculosis associations serve in an advisory capacity to the local groups, counsel with them, help with local programs, and suggest methods of procedure. The state association has always endeavored to raise the standard in regard to clinics, and has urged upon the local associations the observation of ethics in its relation to the medical profession. They advise that the National Association and the Executive Committee of the State Tuberculosis Association are giving this matter serious consideration and will endeavor to devise some plan that will be mutually satisfactory.

Nothing further has been heard from the Tuberculosis Association.

After some discussion it was moved by Dr. M. A. Austin that for the year 1932 an additional committee be added to the Indiana State Medical Society, which would have for consideration the problems of tuberculosis and cancer. Motion seconded, but later, at the suggestion of Dr. F. S. Crockett, the motion was changed to read that this whole matter be referred to the Committee on Civic and Industrial Relations. Motion carried.

Romberger Resolution:

"WHEREAS, The district medical societies are component parts of the State Medical organization; and

"WHEREAS, The welfare of these district medical societies bears an important relation to the welfare of the parent organization, the State Association; and

"WHEREAS, During the past several years there has been an increasing interest taken in the annual district meetings by the members of those districts; and

"WHEREAS, It has become increasingly more expensive from year to year to satisfy the demands for high-grade programs at these district meetings; and

"WHEREAS, The sole revenue in the hands of the district treasury comes from the local societies of the district; and

"WHEREAS, This matter was discussed at the Ninth District meeting held in Lebanon, May 28, 1931, and the councilor for said district was given specific instructions to lay this matter before the Council of the State Medical Association; and

"WHEREAS, The treasury of the State Medical Association has a growing surplus;

"THEREFORE, I move that the sum of 25 cents per paid-up member of each district be paid annually from the general funds of the State Association to the treasurer of the respective districts, these moneys to be used for assistance in putting on the programs of the district meetings."

Since there was some objection to this resolution it was moved by Dr. John H. Hare, duly seconded, that this matter be postponed to the mid-winter meeting of the Council. Motion carried.

DR. M. A. AUSTIN: In a conversation with Mr. Hendricks the other day we spoke of the cancer problem, the problem of the better education of laymen and physicians, and I suggested that it might be a good plan to have the suggestion go to every county society of the state, through the executive secretary, that they hold a meeting each year devoted to the consideration of the cancer problem, and that through the executive secretary satisfactory men could be sent to the various county societies to make worth-while meetings.

DR. B. G. KEENEY: I move that we recommend to the county societies, through the executive secretary, that they hold one meeting during the year devoted to the problem of cancer. (Motion seconded and carried.)

Resolution in Regard to Entertainment at Annual Meeting:

WHEREAS, The Indiana State Medical Association was founded as a scientific society for the advancement of medicine in Indiana; and

WHEREAS, We have noted an increasing stress being put on the social side of the meeting which has increased the cost to the Association and the city which entertains the yearly meeting; and

WHEREAS, It has come to our attention that on account of this increased cost of entertainment many cities which could have the convention have not extended an invitation to us on account of the hurden which falls on the members of the entertaining body;

BE IT RESOLVED, That the House of Delegates go on record as placing a limit on the amount of money which shall be spent on the entertainment of visiting members to the state convention.

DR. E. M. SHANKLIN: I am opposed to this. You cannot enforce it. The House of Delegates have no right to say what any county shall do when it entertains the Association. It is an absolutely local affair and does not belong to the State Association. I move the indefinite postponement of the resolution. (Motion seconded by Dr. Bulson and carried.)

Merger of Fayette and Franklin County Medical Societies:

DR. B. G. KEENEY: That was effected last winter and the new society is functioning.

Discussion of Shoulders' Resolution by Dr. Crockett:

DR. F. S. CROCKETT: I do not know how far you want to go into this, but you will recall that the American Medical Association has been going on record as against certain things in national legislation which have

to do with the hospitalization of World War Veterans. In fact, we have gone so far along that line that the Legion adopted as a slogan that the A. M. A. would be against anything that is for the veterans. In other words, we are losing the sympathy of the very people we are trying to help. We were not saying these things were wrong, but we did not know how to make them right.

At that time Dr. H. H. Shoulders, who is secretary-editor of the Tennessee State Medical Association, suggested a plan, which he brought forward at the Philadelphia meeting of the A. M. A., known as the "Shoulders Resolution". Instead of opposing the hospitalization and treatment of the war veterans with non-service connected disabilities, he comes forward with a constructive suggestion making it possible for the World War veteran to elect himself whether he will be treated at home by his own physician, and in the hospital of his selection, or sent to a veterans' hospital. The details of that plan will be explained by Dr. Shoulders tomorrow at the veterans' luncheon. He is coming here by invitation to put it before us and explain the many details which he is able to go into. I think it would be well worth the time of any of us who can to hear him.

Report on Postgraduate Work:

Dr. B. G. Keeney: All of you know that this is a baby I have carried with me for several years, but we have never gotten anywhere with a postgraduate school. I have talked with the men—some seemed to be in favor of it, indeed, seemed very enthusiastic. I have gone along with a great deal of timidity until last December when I talked before the Council, and they appointed me a committee to investigate postgraduate work in other states. I did, and found of course that nearly all the states have postgraduate schools. Some of them are held during the session of the State Medical Association, and some are not. Two years ago the state of Minnesota had a postgraduate course, or school, for twelve days preceding the meeting of the State Association—then they went to the State Association. The state of Iowa has a postgraduate school, and Ohio is noted for the postgraduate work they do. They have their postgraduate school at the time of their commencement. And so it is all over the country.

I went before the Executive Committee with the facts and they told me to correspond with the secretaries over the state and get their replies and make a report. I sent a letter to every secretary in the state, but I got only thirty replies—they seemed to be enthusiastic. I went before the Secretaries' Conference in May, and they voted unanimously for the postgraduate school. In that letter I commented on the fact that in this postgraduate school it would be opportune to discuss the National Tuberculosis Association, the American Heart Association, as well as the other work that is going on in this country in preventive medicine. Dr. Christian says the medical societies discuss nothing but syndromes, but with this postgraduate school we could find what this research medicine is. It is not necessary to travel to Carnegie Institute to learn what Warren Lewis is doing.

I have yet to see the first man who is not enthusiastic about a post-graduate school—not in connection with the State Medical Association for it might detract from that. What I have in mind is something similar to Minnesota.

I move that a committee be appointed to present a postgraduate program in May of 1932.

Dr. J. B. Rogers: Looking in the Handbook I see there is a report of the Committee on Postgraduate Work of which Dr. Gatch is chairman.

Dr. Keeney: I think that pertains to the sending of a man to the district societies. We want the work done in research medicine done in this city where we have facilities. At a recent meeting of the Metropolitan Insurance Company the president of that company commented on the fact that there is no medical body on research and preventive medicine. My main purpose in establishing a postgraduate school in connection with the Indiana State Medical Association is to build up a program of research and preventive medicine.

The President: As I understood when Dr. Keeney was appointed, he was to come back with some definite recommendations as to what this postgraduate work should be. This committee of which Dr. Rogers speaks will make its report to the House of Delegates. I would suggest that Dr. Gatch later meet with the committee appointed by the Council and settle this question.

Dr. J. B. Rogers: I am in favor of the postgraduate school, but I really believe it should be at the state meeting—perhaps have four or five days instead of three; have an extensive course of clinics in the morning, devote the afternoon to the discussion of papers, and in the evening have some men perhaps of national reputation. I believe this is the place in the state where this could be held—here in Indianapolis. Indianapolis is one of the leading medical centers of the country, and here is the place to have such a postgraduate school.

Dr. A. E. Bulson: You are considering rather a difficult program to carry out. I think the Minnesota plan could be carried out in Indiana, but my suggestion would be that we give these postgraduate courses in the different centers of population in Indiana—make them available to the men of that region, and make them self-supporting. We could have postgraduate courses of four or five days in Hammond, Gary, Fort Wayne, Indianapolis, Terre Haute, Evansville. Send out invitations to the men of that region, and charge them a nominal fee. I have just returned from a convention where they held instructional courses, which is really postgraduate work. That convention has amassed some $100,000 in its treasury, largely from these instructional courses. There is a charge of $1.00 for each course, and they are sold out a week or ten days before the meeting. They ask prominent men from all over the country to talk on the subject in which they are most interested and can give the last word. Each class is limited to twenty.

Dr. B. G. Keeney: I have talked to men outside the state, and the trouble with regional meetings is that if you bring a man, say like Warren Lewis, he would talk to fifteen or twenty men, while if you bring him here he could talk in the morning and repeat it in the afternoon.

The thing I am trying to get at is that we shall have a postgraduate school, and let this committee work it out as to which is the better way. I therefore move that we have a postgraduate school in 1932, and that the president of the State Medical Association appoint a committee to conduct a postgraduate course in 1932. (Motion seconded by Dr. Wadsworth and carried.)

Letter from American Medical Association in Regard to the Establishment of Criminologic Institutes:

A letter from Dr. Woodward, of the American Medical Association, was read by Mr. Hendricks.

Moved by Dr. Wadsworth that this matter be tabled. (Motion seconded and carried.)

Date of Midwinter Meeting:

Dr. John H. Hare: I move that we meet about the usual time, the exact date to be left to the discretion of the Chairman of Council and the Executive Committee. (Motion seconded and carried.)

New Business:

Dr. H. C. Wadsworth: The Daviess-Martin Society have asked me to present this resolution:

"Resolved, That the Indiana State Medical Association hold its annual meeting in the city of Indianapolis."

The Chairman: This will go to the House of Delegates.

The chairman at this time introduced an old friend, Dr. John Sundwall, professor of hygiene and public health, University of Michigan, who made a short address of greeting.

No further business appearing, the Council adjourned until Friday morning following the meeting of the House of Delegates.

THE COUNCIL

Second Meeting

(Indianapolis Session, September, 1931)

The second meeting of the Council was held at 9:10 a. m. Friday, September 25th, in the Chateau Room,

Claypool Hotel, Indianapolis, Indiana, immediately upon adjournment of the final meeting of the House of Delegates. Minutes of the previous meeting were not read. Roll call by the chairman showed the following members present:

1st District—John H. Hare, Evansville.
2nd District—H. C. Wadsworth, Washington.
3rd District—Walter Leach, New Albany.
5th District—O. O. Alexander, Terre Haute.
6th District—B. G. Keeney, Shelbyville.
7th District—E. E. Padgett, Indianapolis.
10th District—E. M. Shanklin, Hammond.
11th District—E. O. Harrold, Marion.
12th District—E. M. Van Buskirk, Fort Wayne.
13th District—J. B. Rogers, Michigan City.

Officers:

A. B. Graham, Indianapolis, president.
F. S. Crockett, Latayette, president-elect, 1932.
J. H. Weinstein, Terre Haute, president-elect, 1933.
A. E. Bulson, Fort Wayne, editor of THE JOURNAL.
Wm. A. Doeppers, Indianapolis, treasurer.
A. C. McDonald, Warsaw, past president.
Thos. A. Hendricks, executive secretary.

An informal discussion of the scientific program took place and the subject was to be discussed further at the midwinter meeting of the Council.

Dr. Bulson asked the Council for a decision in regard to borderline advertising. The Council gave Dr. Bulson a free hand and authorized him to criticize anyone who in his opinion was doing indiscriminate advertising.

With no further business the Council adjourned to meet in Indianapolis in December.

THOMAS A. HENDRICKS,
Executive Secretary.

HOUSE OF DELEGATES

FIRST MEETING, SEPTEMBER 23, 1931

The first meeting of the House of Delegates of the Indiana State Medical Association was held at four o'clock on the afternoon of September 23, 1931, the president, Dr. A. B. Graham, presiding.

THE PRESIDENT: The chair will entertain a motion that the signing of these slips which have been distributed will constitute roll-call of the House.

DR. GEORGE D. MILLER: I move that everyone sign these slips and that that constitute the roll-call. (Motion seconded and carried.)

The slips show the following members present:

Allen—Delegates: D. D. Johnston, J. M. Pulliam, S. P. Hoffman, Fort Wayne. Alternate: A. L. Schneider, Fort Wayne.
Benton—V. L. Turley.
Cass—George D. Miller, Logansport.
Clinton—M. F. Boulden, Frankfort.
Dearborn-Ohio—E. L. Sibbert, Lawrenceburg.
Decatur—I. M. Sanders, Greensburg.
DeKalb—Martin E. Klingler, Garrett.
Delaware-Blackford—E. T. Cure, Muncie.
Floyd—P. H. Schoen, New Albany.
Fountain-Warren—A. L. Spinning, Covington.
Fulton—A. E. Stinson, Athens.
Grant—V. V. Cameron, Marion.
Hamilton—Ray Shanks, Noblesville.
Hancock—E. R. Gibbs, Wilkinson.
Hendricks—O. T. Scamahorn, Pittsboro.
Henry—C. E. Canaday, Newcastle.
Huntington—D. D. Bowers, Huntington.
Jay—J. E. Nixon, Portland.
Jefferson—S. A. Whitsitt, Madison.
Kosciusko—C. N. Howard, Warsaw.
LaGrange—J. E. Rarick, Wolcottville.
Lake—T. W. Oberlin, Hammond; C. R. Pettibone, Crown Point; F. A. Malmstone, Griffith.
LaPorte—J. N. Kelly, LaPorte.
Lawrence—H. C. Ragsdale, Bedford.
Marion—Frank C. Walker, H. G. Morgan, H. G. Hamer, J. R. Lewis, W. F. Kelly, H. S. Leonard, H. H. Wheeler, Max Bahr, M. N. Hadley, Indianapolis.
Marshall—T. C. Eley, Plymouth.
Miami—E. H. Line, Chili.
Montgomery—T. Z. Ball, Crawfordsville.
Morgan—R. H. Richards, Martinsville.
Noble—W. F. Carver, Albion.
Parke-Vermillion—C. S. White, Rosedale.
St. Joseph—Geo. J. Geisler, A. S. Giordano, South Bend.
Shelby—W. C. McFadden, Shelbyville.
Sullivan—J. T. Oliphant, Farmersburg.
Tippecanoe—J. W. Shafer, G. K. Throckmorton, Lafayette.
Vanderburgh—L. E. Fritsch, H. M. Baker, Evansville.
Vigo—M. R. Combs, O. R. Spigler, R. G. Harkness, Terre Haute.
Wabash—L. B. Rhamy, Wabash.
Wells—David C. Wybourne, Ossian.

COUNCILORS

District	
Second	H. C. Wadsworth, Washington
Third	Walter Leach, New Albany
Fourth	H. P. Graessle, Seymour
Fifth	O. O. Alexander, Terre Haute
Sixth	B. G. Keeney, Shelbyville
Eighth	F. T. Romberger, Lafayette
Tenth	E. M. Shanklin, Hammond
Twelfth	E. M. Van Buskirk, Fort Wayne
Thirteenth	J. B. Rogers, Michigan City

PAST PRESIDENTS

W. N. Wishard	Indianapolis
W. H. Stemm	North Vernon
W. R. Davidson	Evansville
E. M. Shanklin	Hammond
C. N. Combs	Terre Haute
Frank W. Cregor	Indianapolis
George R. Daniels	Marion
Charles E. Gillespie	Seymour
Angus C. McDonald	Warsaw

OFFICERS

A. B. Graham, President
A. E. Bulson, Fort Wayne, Editor THE JOURNAL
W. A. Doeppers, Indianapolis, Treasurer
Thomas A. Hendricks, Indianapolis, Executive Secretary

THE PRESIDENT: I wish to call your attention to the fact that the By-Laws may be amended at any annual meeting by a *majority vote of all delegates present* at that session after the amendment has lain on the table for one day.

On motion of Dr. E. M. Shanklin, duly seconded, the reading of the minutes of the previous meeting was dispensed with since they had appeared in THE JOURNAL.

Appointment of Reference Committees:

THE PRESIDENT: This is the most important business we have this afternoon. I will ask the secretary to read these committees, and as the names are called I think it would be a good idea for each man to stand and remain standing until that committee is finished, that you may know each other. The committees will report back Friday morning on anything referred to them.

REFERENCE COMMITTEES

1. *Section and Section Work*
   I. M. Sanders (Decatur), Greensburg, Chairman
   F. C. Dilley (Clay), Brazil
   C. C. Crampton (Carroll), Delphi
   A. E. Stinson (Fulton), Athens
   J. N. Kelly (LaPorte), LaPorte
2. *Rules and Order of Business*
   H. C. Wadsworth (Daviess-Martin), Washington, Chairman
   P. H. Schoen (Floyd), New Albany
   C. N. Howard (Kosciusko), Warsaw
   W. M. Hoppenrath (Madison), Elwood
   J. F. Gillespie (Putnam), Greencastle

3. *Medical Education and Hospitals*
   C. N. Combs (Vigo), Terre Haute, Chairman
   R. L. Sensenich (St. Joseph), South Bend
   J. R. Lewis (Marion), Indianapolis
   S. A. Whitsitt (Jefferson), Madison
   I. M. Washburn (Jasper-Newton), Rensselaer
   (Ex-officio Members—Members of Standing Committee)
   M. N. Hadley, Indianapolis, Chairman
   W. C. McFadden, Shelbyville
   W. R. Davidson, Evansville
4. *Committee on Legislation and Public Policy*
   W. F. Kelly (Marion), Indianapolis, Chairman
   C. D. Greene (Owen), Spencer
   I. E. Perry (Wabash), North Manchester
   H. E. Grishaw (Tipton), Tipton
   J. T. Oliphant (Sullivan), Farmersburg
   (Ex-officio Members—Members of Standing Committee)
   J. H. Hewitt, Indianapolis, Chairman
   O. T. Scamahorn, Pittsboro
   W. F. Kelly, Indianapolis
   W. F. Carver, Albion
   A. A. Young, Hammond
   G. E. Denny, Madison
   L. J. Danieleski, Gary
   M. F. Johnston, Richmond
5. *Publicity*
   S. P. Hoffman (Allen), Fort Wayne, Chairman
   D. D. Bowers (Huntington), Huntington
   C. E. Canady (Henry), Newcastle
   R. E. Shanks (Rush), Rushville
   H. C. Ragsdale (Lawrence), Bedford
   (Ex-officio Members—Members of Standing Committee)
   W. N. Wishard, Indianapolis, Chairman
   C. P. Emerson, Indianapolis
   J. H. Stygall, Indianapolis
6. *Hygiene—Public Health*
   H. G. Morgan (Marion), Indianapolis, Chairman
   M. F. Boulden (Clinton), Frankfort
   A. C. Yoder (Elkhart), Goshen
   V. V. Cameron (Grant), Marion
   W. E. Amy (Harrison), Corydon
7. *Amendments to Constitution and By-Laws*
   E. M. Shanklin (Lake), Hammond, Chairman
   J. E. Nixon (Jay), Portland
   J. A. Craig (Lake), Gary
   H. S. Leonard (Marion), Indianapolis
   A. L. Woods (Posey), Poseyville
8. *Reports of Officers*
   G. R. Daniels (Grant), Marion, Chairman
   C. R. Pettibone (Lake), Crown Point
   D. D. Johnston (Allen), Fort Wayne
   George Dillinger (Orange), Paoli
   W. L. Grossman (Jennings), North Vernon
9. *Credentials*
   G. D. Miller (Cass), Logansport, Chairman
   E. T. Cure (Delaware-Blackford), Muncie
   A. L. Spinning (Fountain-Warren), Covington
   Ray Shanks (Hamilton), Noblesville
   O. D. Hutto (Howard), Kokomo
   (Ex-officio Members—Members of Standing Committee)
   G. D. Miller, Logansport, Chairman
   I. E. Perry, North Manchester
   J. A. Work, Elkhart
10. *Miscellaneous Business*
    J. E. Rarick (LaGrange), Wolcottville, Chairman
    W. F. Waller (Steuben), Angola
    T. W. Oberlin (Lake), Hammond
    J. W. Shafer (Tippecanoe), Lafayette
    M. F. Johnston (Wayne-Union), Richmond

Reports of Officers

The President: These reports are printed in the September number of The Journal, but each chairman will receive five minutes to make any additions or explanation to the reports already published.

Report of Executive Secretary:

Accepted as printed in The Journal. Referred to Committee on Reports of Officers.

Report of Treasurer:

Accepted as printed in The Journal. Referred to Committee on Reports of Officers.

Report of Chairman of Council:

Accepted as printed in The Journal. Referred to Committee on Reports of Officers.

Reports of Standing Committees

Credentials:

Dr. George D. Miller: We want each delegate to sign these slips. We will call the roll from them Friday morning. You can get them from someone in the rear of the room. (Report referred to Committee on Credentials.)

Executive Committee:

Accepted as printed in The Journal. Referred to Committee on Reports of Officers.

Public Policy and Legislation:

Accepted as published. Referred to Committee on Public Policy and Legislation.

Bureau of Publicity:

Dr. William N. Wishard: The report of the Bureau of Publicity is too voluminous to attempt to refer to it, but there are a few points that I believe should have careful reading.

One is the establishment of a central publicity bureau by the Indiana State Dental Association, which has been approved by the Bureau of Publicity. The conditions of that approval are, briefly, that any articles submitted for publication by the State Dental Committee shall be submitted to the Bureau of Publicity of the Indiana State Medical Association, and that we shall make such inquiry and investigation as we think wise before publication. It is purely dental publicity of the right sort, such as we have been endeavoring to give in medical publicity. I ask your careful reading of that part of the report.

The other question to which I wish to call attention is the fact that it has been the disagreeable duty of the Bureau of Publicity during the past year to have referred to it repeatedly and from various sources evidence of a sort of fee-splitting that we very much regret. You will find reference to it on page 50 of the Handbook. It consists in this—that surgical instrument houses, optical establishments, etc., have been in the habit of giving credit memoranda to the physician who refers patients to them to get a truss, a pair of glasses, or something of that kind. Also they have from time to time, instead of giving a credit memorandum, given a check. I have on my desk at my office a check which was given by a certain commercial house to a physician of this city which he disdained to receive, turning it over to me as positive evidence of the unfortunate fact that fee-splitting is going on. I cannot but recall at this moment that some years ago the Indianapolis Medical Society had occasion to discuss the subject of fee-splitting. Our former president and dear friend, Dr. John H. Oliver, who has passed to his reward, in his wonderfully clear, epigrammatic, pointed way, introduced his remarks by saying: "Mr. President, and Gentlemen of the Indianapolis Medical Society, I never expected to live to see the day when it would be necessary for the Indianapolis Medical Society to discuss the question of whether it was right to be honest or not." That is the sum and substance of it all.

We invite you gentlemen to aid the Bureau of Publicity in giving the right kind of publicity (and we are not afraid to use it); we invite you to give us evidence of anything of this sort that is going on in the state of Indiana. We have written evidence of some of it, but we do not propose to publish it at present. We have had very cordial responses from some commercial houses who have said that while they have given credit memoranda, or check, they have quit it and will not do so again. It is corrupting, it is wrong, it is unethical, it is not according to right ideals.

The Bureau of Publicity is not a judicial body; it is an interpretative body. It has referred to it many questions which seem to require judicial action, but we decline to take such action. But we have the inescapable duty of giving publicity to the things that affect the honor and integrity and idealism of our State Medical Association.

This report was referred to the Committee on Publicity.

At this point Dr. E. H. Cary, president-elect of the American Medical Association, and guest of honor of this Association, was introduced to the delegates.

Medical Education and Hospitals:

DR. MURRAY N. HADLEY: Any of you who may have read the report of this committee as submitted will note that the committee has rather changed its activities from those of the past. We assume that our activities should be directed to postgraduate study, or rather graduate study of medicine, rather than undergraduate study. The question of medical education as it pertains to the undergraduate is hardly within our scope. However, the field of graduate medicine and medical education is a much larger one and one on which we believe more emphasis should be laid. I think it is pretty well understood that the scientific programs of our medical organizations leave something to be desired. Otherwise, it is our belief there would not be the demand which there seems to be for the organization of study groups, academies of medicine and other societies which direct their attention to the scientific side of medicine. Therefore this committee feels its activities should be directed to graduate education rather than undergraduate.

(Report referred to the Committee on Medical Education and Hospitals.)

Scientific Work:

Report accepted as published. Referred to the Committee on Scientific Work.

Necrology:

This report will be furnished later. Referred to the Committee on Miscellaneous Business.

Industrial and Civic Relations:

September 15, 1931.

Members of the House of Delegates,
Indiana State Medical Association.
Gentlemen:

The Committee on Civic and Industrial Relations has no report to make at this time.

As chairman of this committee I have worked with Dr. Walter F. Kelly, a member of the Committee on Legislation and Public Policy on the problem of safeguarding the hospital and doctors' fees in cases of personal injuries arising from automobile accidents. We have made some progress, but we are not yet ready to make a definite recommendation.

The American College of Surgeons is working on this same problem. From their collected statistics the following brief summary will give you an idea of the question involved:

In the United States in 1929 there were between 200,000 and 250,000 highway accidents. The total hospital maintenance of these cases amounted to between fifteen and sixteen million dollars. The financial loss to these hospitals during the same year amounted to between six and seven millions, due to non-payment of bills. These amounts do not include the unpaid doctors' bills, which probably amount to a higher figure.

We suggest that the House of Delegates appoint a committee to study this problem further and to confer with the insurance companies in order to try to arrive at some plan whereby the hospitals and physicians can be paid for their services at the time the financial settlement is made in the cases of personal injury claims.

Respectfully yours,
JEWETT V. REED, M.D.

DR. WALTER F. KELLY: In our study of this matter we have talked to some of the adjusters of insurance companies. As you know, the companies settle with the individual; they have no liability as far as the doctor is concerned. They pay the individual for whatever damage there may be to him, and they also recompense him for his doctor and hospital bills, but a large number of these people who are so paid for doctor and hospital fees never pay the doctor and hospital. You have all had that experience. There are some insurance companies who try to protect the doctor in various ways—they may get a signed order from the individual that the insurance company pay the doctor and hospital direct, or they may make out two checks, one covering the personal damage, and one for the doctor and hospital bills, the latter check made in the name of the two individuals, so that the person receiving the check cannot collect it until the doctor signs the check. From our conversation with some of the adjusters there seems to be a willingness on their part to help us get these fees.

I believe if a committee were appointed from this body with power to act for the State Association, that we could get an agreement from most of the insurance companies that do business in Indiana so that we will be protected. I hope that the House of Delegates at its final meeting will appoint a committee that will have power to act and see if we cannot get this matter straightened out and save this tremendous loss going on every year.

DR. GEORGE J. GEISLER: Would that preclude the possibility of enacting legislation later on?

DR. W. F. KELLY: The lien bill before the Legislature last year was fought by the insurance companies. An adjuster of an insurance company told me that that bill would have been declared unconstitutional, and I think probably from what he said it could be. I believe the best way to get at these things is by an agreement rather than by legislation. Legislation might drag on for a couple of years before it was settled.

(Report referred to the Committee on Public Policy and Legislation.)

Delegates to American Medical Association:

(No report.)

Committee on Arrangements:

Referred to Committee on Miscellaneous Business.

Committee on Diphtheria:

Referred to Committee on Medical Education and Hospitals.

Secretaries' Conference:

Accepted as published. Referred to Committee on Miscellaneous Business.

Budget:

This report is always printed in the January number of THE JOURNAL, following the midwinter meeting of the Council. No report at this time.

Reading of Communications:

August 11, 1931.

Executive Committee of the
Indiana State Medical Association.
Gentlemen:

Since my resignation as superintendent of the Indianapolis City Hospital I have accepted a position as director of the medical department of Eli Lilly & Company, and in fairness to the state organization and to my new position I herewith submit my resignation as treasurer of the Indiana State Medical Association, to become effective December 31, 1931.

It has indeed been a distinct pleasure and honor to serve the Association as treasurer since 1925, and at the completion of the audit this year I am quite sure that the funds of the Association are in good condition as will be shown in the audit.

I want to take this opportunity to thank the Executive Committee and all the officers of the Association for their hearty cooperation in financial matters relating to the Association, and their interest in following out the budgets that have been made from year to year. My interest will always be with this Association, and if I can serve in any capacity whatsoever to make it a bigger or better Association, I trust that you will count on me as one of your most loyal members.

Respectfully submitted,
WM. A. DOEPPERS, M.D.,
Treasurer.

Dr. F. W. Cregor: I move that this be referred to the Committee on Reports of Officers with instructions to take appropriate action. (Motion seconded by Dr. Shanklin and carried.)

The President: At this time it is with some sadness that I announce to the delegates that Dr. Harry Elliott, of Brazil, is expected to die at any moment of cancer which has produced complete pyloric obstruction. He has served many years as delegate to the State Association, and also as a delegate to the American Medical Association up to the time of his illness.

Moved by Dr. F. W. Cregor that the secretary be instructed to send a telegram of sympathy to Dr. Elliott. (Taken by consent.)

Moved by Dr. F. W. Cregor that the chair appoint a committee to prepare memorials for the past-presidents who have died during the past year. (Motion seconded and carried.)

A telegram of greeting from the Colorado State Medical Association was read, and the secretary instructed to send a telegram in reply; also one to the Michigan State Association, meeting at this time.

Unfinished Business:

The President: Under this head we take up the amendment to the Constitution that a member of the State Board of Health be given a place in the House of Delegates. This was presented originally by Dr. A. J. Hostetler, of LaGrange county, in 1927, as follows:

"That the By-Laws of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician."

This was laid over one year; laid on the table in 1928 at the request of Dr. Hostetler; taken up in 1929, and the original motion adopted. This was found to be unconstitutional, as it amended the By-Laws and not the Constitution.

Dr. Hostetler presented the amendment again:

"Be It Resolved, That Article V of the Constitution of the Indiana State Medical Association be amended to read as follows:

" 'The House of Delegates shall be the legislative and business body of the Association, and shall consist of (1) delegates elected by the component county societies; (2) the councilors; (3) the ex-presidents of the Indiana State Medical Association; (4) *a member of the State Board of Health who shall be a member of the Association and shall be selected by the State Board of Health;* and (5) ex-officio, the president, the executive secretary, the treasurer, and the editor of The Journal of this Association, without power to vote, except in case of a tie vote, when the president shall cast the deciding vote."

Dr. Hostetler moved that the House of Delegates order the publication of the foregoing resolution twice during the following year in The Journal, as provided for in Article XIV of the Constitution governing the amendment thereof. This was referred to the Committee on Amendments to Constitution and By-Laws and approved, and it now comes up for final action.

Dr. William N. Wishard: I hope you will pardon me for seeming to speak pointedly upon some of the matters before the House of Delegates. Whatever position I take on any matter affecting the interests of the House of Delegates is purely a matter of principle. I have no personal interest in it one way or the other. I feel most kindly towards the secretary of the State Board of Health, notwithstanding the fact that I rather vigorously criticized some of his official acts.

This is an amendment of our organic law, an amendment providing for the permanent placing of a member of the State Board of Health in this House of Delegates. It is in no sense comparable to the appointment of a fraternal advisory representative to the A. M. A. by the Army and Navy. What does it mean? What is the present status of the matter? It means, first, that it is a provision for something that already exists. There has never been a meeting of the House of Delegates since it was organized when there was not a member of the State Board of Health, and many county boards of health also, members of this House of Delegates, sent here by their local society, having a perfect right to be here, and receiving a cordial and sincere welcome. Here is a proposition which provides that officially there shall permanently be a member of the House of Delegates selected by the State Board of Health, and as I have said, we already have them—Dr. McDonald and Dr. Hostetler were regularly elected delegates to this House at its last meeting in Fort Wayne. They are amply competent and able to present to us and take care of any matter pertaining to public health.

What is the effect of this motion, and what is its intent? I am only stating my own views when I say that it seems to me it is a provision for a permanent place in the House of Delegates for the executive secretary of the State Board of Health. Otherwise I can see no reason for the introduction of such an amendment. That means that it is an opening wedge for other organizations to be represented in this House of Delegates. It means that our State Board of Medical Registration will very soon be sending delegates to this House of Delegates; the State Tuberculosis Association will be sending a delegate here, and so on.

This House of Delegates was organized for the sole purpose of independent, honest, thoughtful, sincere judicial, legislative, business consideration of the work of our beloved profession. Its purpose is to maintain the highest ideals of the medical profession; its purpose is not to legislate in the interest of any particular body or any particular group, but in the interests of the whole profession.

I believe such an amendment as this, if passed, will open wide the door for the entering of other organizations into the House of Delegates, and I believe it will do harm. I say that without prejudice and with the kindest feeling toward everybody, but I say it in honest sincerity. My days of activity are drawing near an end; I have nothing personal to advance. I have only the highest ideals and interests of the State Medical Association at heart, and I beg you, if you desire to maintain these ideals to avoid any entangling alliances and be careful that you maintain the integrity of this Association as it now stands.

Moved by Dr. Herman G. Morgan that this amendment be laid upon the table. (Motion seconded and carried.)

Appointment of Special Committee to change the Constitution and By-Laws to provide for the annual election of a speaker and vice-speaker of the House of Delegates, and to devise ways and means of simplifying the roll-call of the House of Delegates:

Referred to the Committee on Change of Constitution and By-Laws.

Resolution in Regard to Entertainment at Annual Meeting:

Whereas, The Indiana State Medical Association was founded as a scientific society for the advancement of medicine in Indiana; and

Whereas, We have noted an increasing stress being put on the social side of the meeting which has increased the cost to the Association and the city which entertains the yearly meeting; and

Whereas, It has come to our attention that on account of this increased cost of entertainment many cities which could have the convention have not extended an invitation to us on account of the burden which falls on the members of the entertaining body; therefore

Be It Resolved, That the House of Delegates go on record as disapproving the excessive expenditure of money on the entertainment of visiting members to the state convention.

Referred to the Committee on Miscellaneous Business.

Resolution Against Giving Gratuitous Medical Information to Insurance Companies:

Referred to Committee on Public Policy and Legislation.

Medical Reserve Resolution from the California State Medical Association:

Referred to Committee on Public Policy and Legislation.

Presentation of Marshall County Charter:

DR. J. B. ROGERS: This is not a new society but the reorganization of an old society. Marshall county is so situated that they have wonderful opportunities to attend medical meetings in St. Joseph county, and they will continue to do so, but there was a feeling that the county should be represented. This society was organized two weeks ago, and it is my pleasure, Dr. Eley, to present to you this charter.

DR. T. C. ELEY: On behalf of the members I thank you. We had some trouble up there a few years ago, but it is all forgotten now and we are glad to have this charter.

DR. GEORGE J. GEISLER: In May of this year the St. Joseph County Medical Society instructed the delegates to present to the House the following resolution:

"WHEREAS, Honorary membership in the Indiana State Medical Association does not include physicians of the state of Indiana who have attained the age of seventy-five years and have held membership in the Association for twenty years or more; therefore

"BE IT RESOLVED, That the House of Delegates create this classification, which will require no state or national dues, and payment for the state JOURNAL to be made by the county medical society so proposing such name to the State Association for vote and inclusion in such classification."

THE PRESIDENT: This is a change in the Constitution and it will take its regular course—it will lie over one year, and be published in THE JOURNAL twice during the year.

DR. H. C. WADSWORTH: The Daviess-Martin Society wish to present the following resolution:

"RESOLVED, That the Indiana State Medical Association hold its annual meeting in Indianapolis."

Referred to the Committee on Constitution and By-Laws.

Dr. F. W. Cregor presented the following resolutions:

"WHEREAS, The law relative to rabies is being enormously abused, resulting in heavy expense to the state by providing transportation, board, etc., for those receiving the treatment, and providing treatment for a large number of persons amply able to bear the expense of the same; and

"WHEREAS, The treatments are so simple that any licensed physician can properly administer them; therefore

"BE IT RESOLVED, That the Legislative and Public Policy Committee of the Association be instructed to use its every effort to secure an amendment to the present statute which will have the effect to correct these evils by requiring that patients shall be declared dependents by the Judge of the Circuit Court on competent evidence, and that the State Board of Health confine its activities to the quarantining and control of rabid animals, providing treatment only to those who have been declared dependents by the Board."

Referred to the Committee on Public Policy and Legislation.

To amend Section 13, chapter 7, of the By-Laws as follows:

Strike out all of Section 13, substituting in lieu thereof the following:

"The President of the Association, the Editor of THE JOURNAL, and the Chairman of the Council, together with two members of the Association, which two members are to be nominated by the President, and elected by the House of Delegates as hereinafter provided, shall constitute the Executive Committee of the Association."

On the adoption of this amendment the President shall nominate two members, one for two years and one for one year. Thereafter, one member shall be nominated by the president each year and elected as hereinbefore provided.

Referred to Committee on Amendments to the Constitution and By-Laws.

DR. F. W. CREGOR: The following resolution was adopted at the Fort Wayne session, September, 1930:

"RESOLVED, That no member of the Indiana State Medical Association shall serve as a member of two major committees in any one year. The Council shall be considered a major committee."

I move that the last sentence, be stricken out.

Referred to the Committee on Constitution and By-Laws.

The House of Delegates adjourned until seven o'clock Friday morning.

HOUSE OF DELEGATES

SECOND MEETING

September 25, 1931

The second meeting of the House of Delegates, the usual breakfast meeting, was held in the Chateau room of the Claypool Hotel, Friday morning, September 25th, the president, Dr. A. B. Graham, in the chair.

Roll-call showed the following delegates present:

Allen—D. D. Johnston, J. M. Pulliam, S. P. Hoffman, Fort Wayne.
Cass—George D. Miller, Logansport.
Daviess-Martin—H. C. Wadsworth, Washington.
Decatur—I. M. Sanders, Greensburg.
Elkhart—A. C. Yoder, Goshen.
Floyd—P. H. Schoen, New Albany.
Fountain-Warren—A. L. Spinning, Covington.
Fulton—A. E. Stinson, Athens.
Gibson—J. L. Morris, Princeton.
Grant—V. V. Cameron, Marion.
Hamilton—Ray Shanks, Noblesville.
Hancock—E. R. Gibbs, Wilkinson.
Harrison—W. E. Amy, Corydon.
Hendricks—O. T. Scamahorn, Pittsboro.
Henry—C. E. Canaday, Newcastle.
Huntington—D. D. Bowers, Huntington.
Jefferson—S. A. Whitsitt, Madison.
Kosciusko—C. N. Howard, Warsaw.
LaGrange—J. E. Rarick, Wolcottville.
Lake—F. A. Malmstone, Griffith.
Laporte—J. N. Kelly, Laporte.
Lawrence—H. C. Ragsdale, Bedford.
Marion—Frank C. Walker, H. G. Morgan, H. G. Hamer, J. R. Lewis, W. F. Kelly, H. S. Leonard, H. H. Wheeler, Max Bahr, M. N. Hadley, C. H. McCaskey, Indianapolis.
Noble—A. F. Carver, Albion.
Parke-Vermillion—C. S. White, Rosedale.
Porter—C. M. Davis, Valparaiso.
Putnam—J. F. Gillespie, Greencastle.
Rush—Roy E. Shanks, Rushville.
St. Joseph—Geo. J. Geisler, A. S. Giordano, R. L. Sensenich, South Bend.
Shelby—W. C. McFadden, Shelbyville.
Sullivan—J. T. Oliphant, Farmersburg.
Tippecanoe—J. W. Shafer, G. K. Throckmorton, Lafayette.
Vanderburgh—L. S. Fritsch, H. M. Baker, Evansville.
Vigo—M. R. Combs, O. R. Spigler, R. G. Harkness, Terre Haute.
Whitley—B. F. Pence, Columbia City.

COUNCILORS

District	
First	J. H. Hare, Evansville
Second	H. C. Wadsworth, Washington
Third	Walter Leach, New Albany
Fourth	H. P. Graessle, Seymour
Fifth	O. O. Alexander, Terre Haute
Sixth	B. G. Keeney, Shelbyville
Seventh	E. E. Padgett, Indianapolis
Ninth	F. T. Romberger, Lafayette
Tenth	E. M. Shanklin, Hammond
Eleventh	E. O. Harrold, North Manchester
Twelfth	E. M. Van Buskirk, Fort Wayne
Thirteenth	J. B. Rogers, Michigan City

OFFICERS

A. B. Graham, President
A. E. BULSON, Editor THE JOURNAL
W. A. Doeppers, Treasurer
Thomas A. Hendricks, Executive Secretary

A quorum being present, the House of Delegates proceeded to the election of officers, which resulted as follows:
President-elect—Joseph Hamilton Weinstein, Terre Haute.
Treasurer—A. F. Weyerbacher, Indianapolis.
Delegates to the American Medical Association—F. S. Crockett, Lafayette; A. E. Bulson, Fort Wayne.
Alternates—W. C. McFadden, Shelbyville; G. D. Scott, Sullivan.
Alternate to take the place of Dr. Sensenich—Geo. J. Geisler, South Bend.

THE PRESIDENT: It gives me great pleasure at this time to introduce your president-elect and my good friend, Dr. Joe Weinstein.

DR. JOSEPH H. WEINSTEIN: I do not know how to thank you for the honor you have conferred upon me, but I hope I can, with the help of these good fellows, keep up the standard of my predecessors. I will do the best I can to serve you.

Invitations for the 1932 meeting were received from Michigan City, Lafayette, and West Baden. On balloting Michigan City was chosen as the place of meeting for 1932.

Election of Councilors

Third District—To succeed Walter Leach. (Meeting will not be held until October.)
Sixth District—Samuel Kennedy, Shelbyville.
Ninth District—F. T. Romberger, Lafayette.
Twelfth District—E. M. Van Buskirk, Fort Wayne.

Reports on Reference Committees

Committee on Section and Section Work:

DR. J. N. KELLY: This committee wants to approve the method of meeting this year rather than the three-section meeting. That is our report.

On motion this report was received.

Committee on Medical Education and Hospitals

Your reference committee recommends the adoption of the report of the Committee on Medical Education and Hospitals, and the report of the Committee on Diphtheria.

The topic of graduate instruction appears to have been discussed thoroughly, not only by this committee but by others, and even by the president in his address, and it is now time to institute an actual course of postgraduate study and put into effect the ideas developed.

We particularly commend the plan of using existing clinical material in even the smaller hospitals throughout the state, and feel that the county medical society is not functioning properly and adequately unless it is availing itself of this opportunity.

We are very proud of Dr. Rice's report and cannot escape the conclusion that the coexistence of the lifetime of this committee and the lowest morbidity and mortality rate from diphtheria is a matter of cause and effect. Dr. Rice's exhibit visualizes the report in a striking way and should have the attention of all members of the Association.

CHARLES N. COMBS, Chairman,
R. E. SENSENICH,
S. A. WHITSITT,
J. R. LEWIS.

On motion of Dr. Combs, duly seconded, this report was adopted.

Committee on Legislation and Public Policy

Dr. Reed's report of the Committee on Civic and Industrial Relations: We recommend that the president appoint a committee of two who will act with the secretary as a committee to get together with the insurance companies and see if we cannot have some arrangement whereby our bills will be taken care of at the time of settlement with the individual.

Moved by Dr. Bulson that the recommendations of the committee be accepted and that the president appoint such a committee with power to act. Motion seconded by Dr. Daniels and carried.

Dr. Cregor's Resolution in Regard to Rabies: This was approved by the committee.

DR. F. W. CREGOR: Information has come to me within the last day or two that there was an amendment to the law in the last General Assembly, and that the provision in the law for the treatment of these cases by the State Board of Health was not repealed. If it had been repealed there would be no necessity for this resolution. Dr. Henning is quite conversant with the present practice and attitude of those concerned in this matter and I would like him to speak to the House of Delegates. We voted on a resolution bearing on this a year or two ago, but I do believe it would be helpful if this matter is kept before the profession of the state until it is ironed out.

DR. CARL HENNING (Hanover): This legislation was passed when the rabies treatment was not perfected and rabies was not as prevalent as it is now. About 1928 rabies was so prevalent that it was impossible for the State Board of Health to take care of those who were sent in, so the Legislature of 1929 passed a law that made it possible to procure rabies vaccine the same as antitoxin under the free antitoxin law. But it did not repeal the old law which provided for rabies treatment being given by and at the State Board of Health. I am informed that since the passage of that law the number of patients being sent to the State Board of Health has not decreased, but the area from which they are sent has become limited. At the present time they are still treating at the State Board of Health, at public expense, a large number of persons, sometimes as many as one hundred a day. Under the law they cannot refuse to take care of them when they come, pay their transportation and their board. All these patients under the law can be taken care of at home, the serum provided at their homes and administered by the doctor at home, so the only thing really necessary is to procure the repeal of this old law.

DR. ANGUS MCDONALD (Warsaw): The State Board of Health has taken action along this line as far as they are able. This law at present makes it mandatory for the State Board of Health to take care of these cases. They come, with papers signed by the trustees even when they are able to take care of it at home. I move the adoption of the committee's report. (Motion seconded and carried.)

Resolution Against Giving Gratuitous Information to Insurance Companies: The committee is of the opinion that it is not necessary to adopt this resolution since it is before our national organization, but rather to endorse it.

DR. A. E. BULSON: I move that this House of Delegates accept the recommendation made by the committee, and that our delegates to the American Medical Association be instructed to favor the resolution of the Michigan State Medical Society. (Motion seconded and carried.)

Medical Reserve Resolution from the California State Medical Association: We recommend that this resolution be passed by this Association in order to make it as widespread as possible.

Moved by Dr. J. B. Rogers, duly seconded, that this recommendation of the committee be adopted.

DR. A. E. BULSON: I move the acceptance of the Report of the Committee on Legislation and Public Policy as a whole. (Motion seconded by Dr. Davidson and carried.)

Report of Committee on Publicity: The excellent and detailed report of the Bureau of Publicity gives fully the work which this committee is doing. It is quite evident that this committee has a definite perspective and is attaining that end.

Through its work it not only is moulding the public mind toward a better feeling for our profession but is also making headway in correcting the faults that are to be found in our profession.

We believe that there is no work more needed at this time than the work of this Bureau, and ask the unanimous acceptance of our report which unreservedly commends the work of the Bureau of Publicity.

We wish to pay special tribute to the untiring efforts of its members, especially to that beloved physician and surgeon, William N. Wishard, who by his many years

of devoted service and his high ideals of practice is a paragon for all physicians and shall enshrine his lasting memory in the hearts of all who knew him for generations to come.

S. P. HOFFMAN, Chairman,
D. D. BOWERS,
ROY E. SHANKS,
H. C. RAGSDALE,
C. E. CANADAY.

On motion, duly seconded, this report was adopted.

Committee on Constitution and By-Laws:

Resolution in Regard to Increasing the Classification for Honorary Membership: Your committee to which was referred this resolution recommends that same be adopted. I move the adoption of this report. (Motion seconded and carried.)

Resolution Adopted at the Fort Wayne Session:

Your committee to which this resolution was referred recommends that same be adopted. I move the adoption of this report. (Motion seconded and carried.)

Resolution of Daviess-Martin Society:

Your committee to which this resolution was referred recommends that same be not adopted. I move the adoption of this report. (Motion seconded and carried.)

Amendment of By-Laws, Sec. 13, Chapter 7:

Your committee to which this resolution was referred recommends that same be not adopted.

We can see no reason for making any change in the present method of selecting two members of the Executive Committee. Under the present arrangement the two members of the Executive Committee under consideration are named by the Council group—this composed of the thirteen members of the Council and the officers of the Association. The amendment would provide for the naming of these committeemen by the president alone, he submitting his nominations to the House.

We submit that the proposed plan is not democratic and not in keeping with the long approved policies of our Association. I move the adoption of this report. (Motion seconded.)

DR. F. W. CREGOR: This amendment to the By-Laws was offered wholly in the interests of what I consider the welfare of the Association. I believe it is in line with the spirit of our Constitution and with the spirit of the Indiana State Medical Association that all of its officers should be elected by the House of Delegates, which is the most representative body the State Association has. The only criticism I have ever heard of the present Constitution and By-Laws of this Association has been that it delegates too much authority to the Council.

I am casting no reflection, making no criticism, but I believe this is in the interests of the Association. I believe the president is a man who will take due consideration of the nominations that he makes, and I believe this is the most important committee probably that we have in the Association—the matters that come before it require careful and mature consideration. It is the Council in adjournment, and the Council is the House of Delegates when the House has adjourned. I believe we are conserving the best interests of the Indiana State Medical Association when we delegate to the president the right to nominate, and reserve for this body the right to elect, these members of this committee.

(Vote on Dr. Shanklin's motion, unanimously carried by rising vote.)

DR. E. M. SHANKLIN: This covers the report of this reference committee. I move the adoption of the report as a whole. (Motion seconded and carried.)

E. M. SHANKLIN, Chairman,
H. S. LEONARD,
J. E. NIXON.

Committee on Miscellaneous Business:

To this committee has been referred—

1. Report of Committee on Necrology, which was not completed due to the illness of Dr. George Richardson. However, as the Executive Committee has written Dr. Richardson thanking him for his efficient service and stating that his report will be acceptable at a later date, the committee suggests to Dr. Richardson that he make this report as soon as possible and we feel sure same will be acceptable.

2. Committee on Secretaries' Conference: This report demonstrates the fact that Dr. A. M. Mitchell and the members of this committee are rendering efficient service.

3. Report of Committee on Convention Arrangements: Thanks are due this committee, as well as the members of the Indianapolis Medical Society, for their efficient work.

4. Entertainment at Annual Meeting: This committee feels that it is up to the individual members of the medical society in the city in which the annual meeting of the Indiana State Medical Association is held to decide how, and in what manner, they wish to entertain the visiting members.

Respectfully submitted,
J. E. RARICK, Chairman,
T. W. OBERLIN,
J. W. SCHAEFFER.

On motion of Dr. Rarick, duly seconded, this report was adopted.

Committee on Reports of Officers:

Your Committee on Reports of Officers begs to submit that we have read carefully the printed reports of each of the several officers and we wish to recommend the acceptance of each report as formulated, and especially commend each and all officers for the thorough manner used in the conduct of their offices.

It is with deep regret that we recommend the acceptance of our efficient treasurer's resignation.

G. R. DANIELS, Chairman,
D. D. JOHNSTON,
GEORGE DILLINGER.

On motion of Dr. Daniels, duly seconded, this report was adopted.

THE PRESIDENT: The chairman will appoint the following committees to prepare memorials for past-presidents:

Dr. George Beasley—Dr. J. W. Shafer, Dr. G. K. Throckmorton.

Dr. David Ross—Dr. H. G. Morgan, Dr. H. S. Leonard.

DR. C. N. COMBS: I move that a vote of thanks be extended to the Indianapolis Medical Society, the Convention Bureau of the Chamber of Commerce, the manager of the Claypool Hotel, the Indianapolis *News, Star* and *Times,* the Associated Press and the International News Service, and the retiring president, for the manner in which this meeting has been put over—one of the best we have ever had. (Motion carried by rising vote.)

DR. GEORGE D. MILLER: I move a vote of thanks to Dr. E. H. Cary for his presence at this meeting and his valuable contribution to its program. (Motion carried by rising vote.)

DR. E. H. CARY: I do not know when I have been so pleased to be the guest of any group. It has been a great pleasure to be here, and certainly very interesting to witness the harmonious fashion in which you have handled the affairs of the Association this morning.

THE PRESIDENT: I again wish to express my sincere appreciation of the honor conferred upon me by election to the highest office of this Association. I have had the hearty cooperation of all the committees and there has been harmony at all times. Like every human being, I am sure I have made some errors, but I feel confident that this annual meeting has been a success and that my distinguished successor will be able to correct the errors I have made this year.

This House of Delegates stands adjourned.

The following Section officers were elected Friday morning:

SURGICAL SECTION

Chairman	W. E. Tinney, Indianapolis
Vice-Chairman	E. Vernon Hahn, Indianapolis
Secretary	George A. Collett, Crawfordsville

Medical Section

Chairman ..... H. M. Baker, Evansville
Vice-Chairman ..... Harvey L. Murdock, Fort Wayne
Secretary ..... B. G. Keeney, Shelbyville

Section on Ophthalmology and Otolaryngology

Chairman ..... F. V. Overman, Indianapolis
Vice-Chairman ..... Hugh A. Kuhn, Hammond
Secretary ..... C. A. Robison, Frankfort

SCIENTIFIC PROGRAM

Thursday Morning, September 24, 1931

General Meeting

The first general meeting of the Indiana State Medical Association was held in the Riley Room of the Claypool Hotel, Indianapolis, Thursday morning, September 24, 1931. It was called to order at nine-ten by the president, Dr. A. B. Graham, of Indianapolis.

Greetings of Indianapolis Medical Society:

Dr. Edmund D. Clark: It is my pleasure and duty to welcome you to Indianapolis, and I give you most cordial greetings. Every member of the Indianapolis Medical Society is a member of the reception committee, and if there is anything we can do to help make your stay pleasant, just call on us. That is a pretty broad statement, but we mean to carry it out—anything that will add to your enjoyment.

Welcome from Indiana University School of Medicine:

Dr. Charles P. Emerson: Members of the Indiana State Medical Association: The Indiana University School of Medicine is eager to welcome you. We feel the School of Medicine and the State Medical Association are bound together in a peculiar way—the success of one is the success of the other—and the two have a particular interest in each other. As the result of twenty years' experience with the fellowship of your group I want to express my gratitude to the Indiana State Medical Association for the support we have had. It has been particularly gratifying and we look forward to the future when the ties between the two organizations may be closer and closer.

I would like to say a few words about state medical schools because that is a popular topic for conversation in medical groups. It is very clear that the states must take their own part, that they must educate the men coming up, because the private schools are reducing their enrollment and spending more time on research, which is right, because the state medical school budgets do not allow that. Nevertheless as the years go by it is more and more clear that the state must be responsible for its own professional education, and without doubt there will be less and less opportunity except in medical schools.

The State Medical School must also be responsible for the graduate nurse. Just as the universities feel that they must have a department of agriculture, of mechanical engineering, of domestic economy, so the university medical schools must be responsible for the education of trained nurses. They must also be responsible for the education of laboratory technicians, of dietitians and physical therapists. The list of responsibilities is increasing. We do not create that demand; it is created for us by society. The state medical school must be in position to answer that demand—not only to train medical men, but also these ancillary medical interests which are so important to the public as a whole.

The state medical school must also look out for the education of public health officers; we have to be in position to give education in public health to those in that work. We look forward to the state medical school being the center, the home of the doctors of the state. Do you want six weeks' course in something? We will be glad to give it. Do you want to come in and study a week on the Wassermann test, or anything else, to pick up a few points—the state medical school is delighted to have you do it. We want the state medical school to be the home of the men of the state. We are willing to do anything we can in order that any regular practitioner may get instruction on any point on which he wishes more information.

We give you a very cordial welcome.

The president, Dr. A. B. Graham, of Indianapolis, read his address, entitled "The Problems of the Indiana Medical Profession".

Dr. F. V. Overman, Indianapolis, chairman of the Section on Ophthalmology and Otolaryngology, presided during the reading of the scientific papers.

Dr. D. O. Kearby, Indianapolis, read a paper entitled "Per Oral Endoscopy as an Aid in Diagnosis". Discussed by Drs. L. A. Smith, Indianapolis; Jane Ketcham, Indianapolis; J. V. Cassady, South Bend; Daniel W. Layman, Indianapolis; and D. O. Kearby.

Dr. Paul D. Crimm, Evansville, read a paper entitled "Non-tuberculous Infections of the Lungs". Discussed by Drs. D. O. Kearby, Indianapolis; H. M. Baker, Evansville.

Dr. B. M. Taylor, Portland, read a paper entitled "Prenatal Care from an Endocrine Standpoint and Its Effects on the Growth and Final Development of the Baby". Discussed by Drs. J. F. Clancy, Hammond; W. E. Mendenhall, Indianapolis; H. F. Beckman, Indianapolis; and B. M. Taylor.

Dr. G. B. Underwood, Evansville, read a paper entitled "Treatment of Common Skin Diseases". Discussed by Drs. D. C. McClelland, Lafayette; E. N. Kime, Indianapolis.

The Thursday morning session adjourned.

Thursday Afternoon

September 24, 1931

The Thursday afternoon session convened at one-thirty, Dr. Harvey L. Murdock, of Fort Wayne, chairman of the Medical Section, presiding.

Dr. O. R. Spigler, Terre Haute, read a paper entitled "Uterine Bleeding, the Cause, with Special Reference to Malignancies and Their Treatment". Discussed by Drs. G. G. Eckhart, Marion; W. C. Moore, Muncie; C. V. Rozell, Anderson.

At this time the president introduced Dr. H. H. Shoulders, secretary-editor of the Tennessee State Medical Association, and a guest of this Association.

Dr. B. W. Rhamy, Fort Wayne, read a paper entitled "Friedman, Reinhart, Scott Hormone Test for Pregnancy". Discussed by Drs. A. S. Giordano, South Bend; H. M. Banks, Indianapolis; G. W. Gustafson, Indianapolis; and B. W. Rhamy.

Dr. W. L. Portteus, Franklin, read a paper entitled "Delivery Technique in the Home". Discussed by Drs. O. D. Hutto, Kokomo; C. O. McCormick, Indianapolis.

Dr. Cornell, Fort Wayne, read a paper entitled "Critical Review of Hypertension". Discussed by Drs. Harry P. Ross, Richmond; Robert M. Moore, Indianapolis; E. N. Kime, Indianapolis.

Dr. H. H. Martin, LaPorte, read a paper entitled "The Future of Surgery". Discussed by Drs. F. H. Jett, Terre Haute; and H. H. Martin.

Dr. H. L. Stanton, Evansville, read a paper entitled "Etiology and Operative Treatment of Squint". Discussed by Drs. James W. Benham, Columbus; M. S. Harding, Indianapolis; and H. L. Stanton.

The Thursday afternoon session adjourned.

Friday Morning

September 25, 1931

The Friday morning session convened immediately following adjournment of the House of Delegates, Dr. W. E. Tinney, chairman of the Surgical Section, presiding.

The following symposium on "Gastrointestinal Diseases" was presented:

Dr. R. L. Sensenich, South Bend, "Medical Phase—Duodenitis and Motor Disorders of the Duodenum".

Dr. Harold D. Caylor and Dr. Truman E. Caylor, Bluffton, "Surgical Phase—Intussusception".

Dr. H. O. Bruggeman, Fort Wayne, "General Phase—Abdominal Surgery in Infancy and Early Childhood".

Discussion by Drs. Roscoe Beeson, Muncie; R. L. Sensenich, Harold D. Caylor, and H. O. Bruggeman.

Dr. C. C. Robinson, Indiana Harbor, read a paper entitled "Present Status of Burn Therapy". Discussed by Drs. A. G. Schlieker, East Chicago, and C. C. Robinson.

Dr. Ernest O. Nay, Terre Haute, read a paper entitled "Early Prostatectomy". Discussed by Dr. J. E. Hiatt, Richmond.

Dr. P. D. Moore, Muncie, read a paper entitled "Traumatic Spine". Discussed by Dr. F. W. Steele.

This concluded the scientific program and the Indiana State Medical Association adjourned *sine die*.

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

August 4, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meetings held July 14, July 21 and July 28 read, approved and signed.

Newspaper release, "Typhoid and Paratyphoid Vaccination," read and approved for publication on August 10.

Newspaper release, "New Health News Service," (introduction of dental releases) read and approved for publication on August 22.

Radio release, Saturday, August 1—"Strenuous Week Ends."

Arrangements for dental releases were completed. Agreement signed by dentists, also by chairman and secretary of Bureau of Publicity. The secretary was instructed to show this to the president of the Indiana State Medical Association for his approval.

The following letter was prepared to be sent to newspaper editors as an introduction for the dental releases:

"Once again the Bureau of Publicity of the Indiana State Medical Association wishes to express its sincere appreciation for the help and co-operation received from you and the other editors and publishers through your use of the weekly health releases. On behalf of the 4,100 physicians of the state, the Bureau wishes to thank you and announce an additional service whereby one release a month will be on some dental subject.

"This release will be prepared by the Dental Health Council of the Indiana State Dental Association and will be approved by the Bureau of Publicity of the Indiana State Medical Association.

"The first dental article will be released Saturday, August 29."

This was to be sent to the dentists for approval.

The Bureau prepared the following tribute to Dr. David Ross, who died August 3:

"The Bureau of Publicity of the Indiana State Medical Association records with every sincere regret the death of Dr. David Ross. As a former member of the bureau and a physician of outstanding character Dr. Ross for many years has occupied a position of unusual usefulness and influence. As a member of the bureau he combined clearness and understanding with firmness and carefulness with such gentleness of spirit that his decisions were respected by all. He was a surgeon of high attainments and a teacher beloved by all his students. As president of the Indiana State Medical Association and the Indianapolis Medical Society and a member of the Bureau of Publicity and later as chairman of the Executive Committee of the state medical association, he filled with ability and great success the various important positions to which he was called. Also for many years he had ably represented the Indiana State Medical Association as a member of the House of Delegates of the American Medical Association. In his professional and private life he exemplified the golden rule to an unusual degree.

"The Bureau of Publicity extends its very sincere sympathy to his family."

Copies of radio talks entitled "Devils, Drugs and Doctors," given by Dr. Howard W. Haggard, of Yale University, received. The Bureau approved the purchase of a binder to keep these releases permanently.

The following letter was received from Science Service, Inc., and the following answer was made:

"Science Service, the institution for the popularization of science, desires to keep in very close touch with all organizations having research, industrial or general scientific interests.

"Our work of providing newspapers and magazines with accurate and timely accounts of the progress of science will not be complete unless we are able to report the activities of such organizations.

"Many organizations have found that it is effective to send us from time to time the same material that they send their members, that is, copies of the meetings, programs, membership lists, publications, etc. You may already be doing this in which case we desire to express our appreciation. If not, it will be helpful, indeed, if this material can come to us.

"A list of Indiana State Medical Association members should be in our reference library. As this is foundational material, we would welcome it now together with any other special material you may care to send."

"We are indeed most pleased to receive your letter of July 22 and I feel sure that the Bureau of Publicity of the Indiana State Medical Association, to which it will be referred, will be most happy to help you in any way possible.

"We will place your name upon our mailing list, if you so desire, for all our bulletins. As you undoubtedly understand, most of these bulletins are of local medical organization interest. The weekly newspaper release which is prepared by the Bureau of Publicity may be of more general value to you.

"The purpose of these releases is similar to that of the articles prepared by the Scientific Service, Inc., that is, to give accurate and timely accounts of the progress of scientific medicine in terms that the man on the street can understand.

"We will not be able to send you our membership list as the only up-to-the-minute list we have is contained in our Kardex files. We, however, would suggest, if you have not already done so, that you obtain an American Medical Directory, published by the American Medical Association, 535 North Dearborn street, Chicago, Illinois, which is the official directory for the medical profession."

Requests for speakers:

August 12—Newcastle Rotary Club, Newcastle, Ind. Speaker selected to talk upon "The Business Man's Heart."

August 19 or 26—Midsummer holiday meeting, Fulton County Medical Society. Out-of-state speaker to talk on "Syphilis" desired. Bureau attempting to get man suggested by secretary of Fulton County Medical Society.

Bulletin received from American Pharmaceutical Manufacturers' Association containing material upon narcotic addicts that may be used for future release.

Announcement received of the short courses of the Indiana Tuberculosis Association to be held during September and October.

The following bill was approved for payment:

Central Press Clipping Service $7.80

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole August 25, 1931.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

Monthly Report, August, 1931

There were reported this month from all sources 706 cases of diseases from ninety counties of the state. Newton and Noble did not report either positive or negative; 1,264 cases were reported last month; 725 negative cards were sent in. The general prevalence trend for the month shows the season's decline, except typhoid fever, which is normal.

Typhoid Fever. The reported incidence of typhoid fever shows that the disease increases as the season advances. The peak of the disease will be reached in September. There were sixty-seven cases reported during the month; twenty-three cases the previous month; the corresponding month the preceding year, sixty-eight cases. The estimated expectancy over a seven-year period for August is sixty-nine cases. There were twenty-five cases reported from the urban and forty-two cases from the rural population. The two cities reporting the greatest number of cases were Logansport and Indianapolis, eight and seven cases, respectively. Putnam county in and around Cloverdale reported eleven cases. The remaining cases (thirty-one) are distributed over twenty-seven counties.

Diphtheria. A slight increase is shown. The current report shows fifty-two cases. The previous month forty-five cases. The same month the preceding year forty-five cases were reported. The average for August over the seven-year period is sixty-nine cases. The reported incidence shows a decline for the disease. No deaths in May, seven in June and two in July of this year.

Scarlet Fever. Eighty cases of scarlet fever were reported during the month. One hundred sixteen cases the previous month. August is characterized as the low month for the reporting of this disease. Only one other time, since the record has been kept, have there been so few cases reported and that was in 1930 when seventy-three cases were reported. The estimated expectancy was one hundred nine cases.

Smallpox. The prevalent incidence of smallpox during the month, sixty-one cases, is thirty-eight percent of the number reported last month. Like most of the communicable diseases it has a low level in August. The average for August is seventy-seven cases. Smallpox will increase in the late autumn when the people begin to shut themselves up in their homes. It is a close contact disease.

Poliomyelitis. There were ten cases of poliomyelitis reported this month. Only two cases reported in the previous three months. Three cases in August the preceding year. South Bend reported five cases, one case each from Lafayette and East Chicago. Two cases from Tippecanoe county area and one case from Marshall county. The disease is epidemic in the New England and Middle Atlantic States, especially Massachusetts, Connecticut, New York and New Jersey. Quite a number of cases are being reported from Illinois, Michigan, Wisconsin and Minnesota. It behooves the health officers and physicians of Indiana to be on the lookout for the disease. An early diagnosis is the crux of the situation.

Cerebro-spinal Meningitis. There is very little change in the prevalence of meningitis. Fifteen cases the current month and fourteen cases the previous month. Seventeen cases in June of this year. Twenty-five cases were reported the corresponding month the preceding year. Eight cases from Indianapolis, two cases from Fort Wayne, and one case each from East Chicago, Lafayette and Portland. One case each from the rural districts of Bartholomew and Vanderburgh counties.

The name and number of diseases not mentioned above that were reported the current month are as follows: Tuberculosis, 239; chickenpox, 11; measles, 54; whooping cough, 171; influenza, 23; pneumonia, 2; mumps, 16; undulant fever, 1; malaria, 2, and pellagra, 1 case, in Dubois county.

Monthly Report, September, 1931

Seven hundred twenty-five cases of diseases were reported by the health officers of the state from seventy-two counties. Fifteen counties had no cases to report, but sent in negative cards. Five counties, namely, Decatur, Newton, Perry, Pike and Warrick made no report, whatsoever. Eighty-seven counties sent in negative cards from one to twenty-four totaling 532 cards. Seven hundred six cases the previous month; 702 cases reported the corresponding month the preceding year.

A summary of current prevalence of diseases from the urban and rural population is shown below:

Diseases	*Total*	*Urban*	*Rural*
Tuberculosis	205	93	112
Chickenpox	21	16	5
Measles	28	26	2
Scarlet fever	112	58	54
Smallpox	31	18	13
Typhoid fever	66	20	46
Whooping cough	120	103	17
Diphtheria	56	30	26
Influenza	46	0	46
Mumps	22	22	0
Poliomyelitis	12	5	7
Cerebro-spinal meningitis	5	3	2
Undulant fever	1	1	0
Grand total	725	395	330

There is a very slight variation in the prevalence of diseases over the previous month or the corresponding month the preceding year. September is regarded as a summer month. It is well known that there are fewer cases of diseases in warm weather than cold weather. All the principal communicable diseases are contact or house diseases, except typhoid fever.

Typhoid Fever. The prevalent incidence of the disease shows that the peak for the season has been reached. In fact, September has been the peak month for the last five years. There were sixty-seven cases reported the previous month. The corresponding month the preceding year fifty-four cases.

Diphtheria. The season's low for diphtheria is still manifest. Fifty-two cases last month. Fifty-eight cases the same month last year. The normal average for September over the last five-year period is eighty-five cases. The average mortality for the same period is 177 deaths. It would help some, perhaps, if every practicing physician in the state of Indiana will read this item. This looks better: The last four months of the current year: May, no deaths, 81 cases; June, seven deaths, 105 cases; July, two deaths, 45 cases; August, five deaths, and 52 cases reported.

Scarlet Fever. September is the last month for low prevalence of scarlet fever. From now on until late spring of 1932, the disease will increase in leaps and bounds. Eighty cases were reported the previous month; 128 cases the corresponding month last year.

Smallpox. Smallpox goes to the lowest level in September. There were sixty-one cases reported the previous month. Seventy-three cases the same month the preceding year. The estimated expectancy was sixty-four cases. The estimated expectancy is based on the experience of the last seven years, including epidemics. The disease will increase as cold weather approaches. It is a house infection.

Poliomyelitis. A slight increase is noted in the prevalence of poliomyelitis. Ten cases were reported the previous month. The disease is subsiding in the North Atlantic states. An increase is recorded in Michigan. Four cases in Fort Wayne. Two cases each in DeKalb and Tippecanoe, and one case each in Delaware, Henry, Jefferson and Steuben counties. Outside of Fort Wayne the cases seem to be sporadic. No epidemic seems imminent.

Cerebro-spinal Meningitis. There is a marked decline noted in cerebro-spinal meningitis. Fifteen cases were reported the previous month. One case from Indianapolis. Two cases from the rural district of Clark and one case each from Gibson and Putnam counties.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health,
U. S. P. H. Service.

INDIANA VENEREAL DISEASE CLINICS

Number of cases never previously admitted	417
Total number of old cases and readmissions under treatment during month	5,165
Number of cases discharged as arrested or cured during month	193
Number of cases discontinued treatment without permission	336
Total number of cases remaining under treatment during month	5,053
Number of male syphilitic cases remaining under treatment during month	2,330
Number of female syphilitic cases remaining under treatment during month	1,561
Total number of syphilitic cases remaining under treatment during month	3,891
Total number of treatments during month	12,090
Total number of visits to clinic for treatment, examination or advice	14,851

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	235
Gonorrhea	135
Chancroid	5

During the month two hundred seven pamphlets were distributed. One hundred four were mailed upon receipt of thirteen requests and one hundred three were sent to thirteen people on our own initiative.

LAKE COUNTY MEDICAL SOCIETY

The Lake County Medical Society met in regular session at St. Margaret's Hospital, Hammond, on Thursday, September 10, 1931, President Lauer presiding.

The minutes of the June meeting were read and approved.

Application for membership received from Dr. Henry W. Eggers, of Hammond, was referred to the Council.

This being the annual meeting for economics, the program had to do with the very live problems of medical poor relief, particularly in North and Calumet Townships. Our Council having had the matter under discussion for several meetings, President Lauer made a report as to the conclusions of the Council and also presented his personal views in the matter.

Dr. A. G. Schlieker, of East Chicago, discussed the question from the standpoint of one who is engaged in such work, under direction of the local trustee. Following these two presentations the subject was opened to general discussion, a liberal percentage of the unusually large attendance taking part. Dr. Schlieker had presented figures which, while showing a marked increase in the gross amount expended in this work for the eight months of 1931, yet the per capita rate showed a marked decrease. Some 4,700 families are now receiving poor relief at the hands of the North Township trustee, while more than 2,800 families are receiving aid in Calumet Township. Considerable agitation having been noted in the local press, looking toward the employing of salaried physicians to care for the indigent of the county, much of the discussion was directed at this phase of the question, our members being generally of the opinion that such a procedure would be but an entering wedge for various other types of state medicine.

The society unanimously adopted the four declarations set forth by President Lauer:

1. That the present fees for township work be continued. (These are from fifty to seventy-five percent less than the customary fees in our county.)

2. None but emergency surgical operations shall be done at township expense, and these only after a thorough investigation.

3. That the practice of charging for services which have not been rendered be condemned, if such practices exist. (It had been intimated in some of our papers that abuses of this nature had been reported.)

4. That every member extend credit to his worthy patients, thus saving the self-respect and independence of these persons, and thereby save the township's unnecessary expense.

President-Elect Pugh moved that a committee be named to appear before the County Council and the Township Advisory Boards of North and Calumet Townships to register our protest against the appointment of full-time physicians to care for the indigent sick. The motion was unanimously adopted. The chair appointed from North Township Drs. Pugh, Rauschnebach, Oberlin and Given; from Calumet Township, Drs. Baitinger, Greene and Schaible.

Mr. Bradley, secretary of the Whiting Chamber of Commerce, was then invited to give his reaction to the proceedings of the evening. He congratulated the society on the methods adopted in handling the very grave situation and stated that the various Chambers of Commerce of the county would support us in our contention that full-time medical men be not employed.

Meeting adjourned.

A. J. LAUER, President.
E. M. SHANKLIN, Secretary.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

REPORT OF THE CONVENTION AT INDIANAPOLIS

Indianapolis, Indiana, September 26, 1931.

All our Indiana Auxiliary women are interested in the recent convention—the Fourth Annual Meeting of the Woman's Auxiliary to the Indiana State Medical Association. The convention was the largest in women's attendance—about two hundred delegates, members and guests were registered. The program was happily varied with business and entertainment.

Activities began Wednesday afternoon with a State Executive Board meeting, held at the home of Mrs. William F. Clevenger, followed by a garden party and reception for all visiting women in honor of the presidents of the county society auxiliaries.

On Thursday morning at 8:30 o'clock the Woman's Auxiliary breakfast and business meeting was held at the Propylæum. Following the invocation by Mrs. William N. Wishard, and breakfast, the meeting was officially opened by the president, Mrs. William S. Tomlin, who in a brief address welcomed the visiting women. Mrs. A. B. Graham, wife of the president of the Indiana State Medical Association, Mrs. William F. Clevenger, president of the Indianapolis Woman's Auxiliary, and Mrs. John T. Wheeler, parliamentarian, were introduced and responded with greetings to the Auxiliary.

The business program embraced as its outstanding features the reports of the state officers and standing committees. Reports of the county auxiliaries were most

gratifying—each one contributing a necessary quality for the constant and sane growth of the organization. The election and introduction of new officers followed. They are: President, Mrs. L. E. Fritsch, Evansville; president-elect, Mrs. O. O. Alexander, Terre Haute; secretary, Mrs. J. C. Armington, Anderson; and treasurer, Mrs. C. F. Voyles, Indianapolis.

The business session closed with a much appreciated address by Dr. Miles Porter, Sr., of Fort Wayne. The meeting adjourned and the visiting women were driven to the Indianapolis Country Club for one o'clock luncheon and bridge. Members of the Woman's Auxiliary to the Indianapolis Medical Society were hostesses.

At the annual banquet, Dr. Edward Henry Cary, president-elect of the American Medical Association, was the principal speaker. Dr. Cary paid a fine tribute to the women of the Indiana Woman's Auxiliary. It was Dr. Cary who introduced the resolution at the St. Louis meeting in 1922 in the House of Delegates which resulted in creating the Woman's Auxiliary to the American Medical Association.

The following greeting from the national president arrived too late to be presented at the meeting:

"My greetings to the women of the Indiana Auxiliary assembled in their convention. I wish them much pleasure and satisfaction in their meeting and trust that they will find it their pleasure to carry on as much Auxiliary work this year as meets with their Advisory Council's approval.

"I am particularly interested that this year shall be our banner year in promoting *Hygeia*, and that we shall have a good convention at New Orleans. I am depending on the women of Indiana!

(Signed) "Mrs. Arthur B. McGlothlan,
"President, Woman's Auxiliary to the
American Medical Association."

Respectfully submitted,
Mrs. William S. Tomlin.

CORRESPONDENCE

TAKE POLITICS OUT OF STATE APPOINTMENTS FOR MEDICAL POSITIONS

Portland, Indiana, October. 1, 1931.

Editor The Journal:

The Legislature in creating the State Board of Health put the responsibility of its enforcement and management upon the medical and pharmaceutical professions. It is by the physicians of the state for the people of the state. It is passing strange that the medical and pharmaceutical professions of the state who have the responsibility of the enforcement have nothing to do with the appointment of the members of the board. Consequently it is in the hands of a layman and the football of politics. This is a reflection upon the profession of the state. We must, therefore, have a political State Board of Health. The governor of the state is not the one to control the health matters of the state. They are purely medical and should be non-political.

The medical and pharmaceutical professions of the state should have the sole power to recommend the members for appointment. The board should be composed of nine members as follows: Four from the Indiana State Medical Association, one from the eclectic, one from the homeopathic, one from the osteopathic, one from the pharmaceutical associations of the state—they to elect a secretary. The governor should appoint these from three members recommended by the councilors of the associations named. Each succeeding vacancy should be filled by the appointment of one selected from the three selected or recommended. In this way the board would not be in politics. The different associations would recommend three men solely for their ability for the place. The governor, no matter how much his heart is in the work, cannot be the judge of health matters that are purely out of his line. He should not be the judge of who is to be on the Board of Health any more than he should be the judge of who shall be the moderator of the various religious assemblies of the state. We need religion and medicine in politics, but not politics in religion and medicine. The board may not be in politics, but the various state associations should appoint its members. I am not casting any reflections on the present board. I do not know a single member on it. I do think the dignified and professional way to go about it is to have the medical men of the state recommend the ones who are to administer the health problems. If they are not competent to manage their own affairs, then the governor is not.

B. M. Taylor, M.D.

DELIVERY OF FIVE SETS OF TWINS IN NINETY-THREE DAYS

Editor The Journal:

I thought the following might be of some interest to the readers of The Journal.

Within a period of ninety-three days, from June 21st, 1931, to September 12th, 1931, I delivered five sets of twins as follows:

June 21st, Union Hospital, Merle E. Eskew and wife, boy and girl, Jack Lee and Beverly Jean.

August 15th, Union Hospital, Wilbur W. Husband and wife, boy and girl, Wayne Martin and Beverly Joan.

August 15th, St. Anthony Hospital, John Childs and wife, boys, John Lewis and Charles Lewis. These two were born within a period of six hours.

August 27th, at home, Claude E. Champion and wife, girls, Martha Jean and Ruth Elizabeth.

September 12th, Union Hospital, Kenneth Anderson and wife, boy and girl, Kenneth Ray and Marjorie Fay.

The last four sets were born within a period of twenty-eight days. All are living and doing well. I would like to hear of any better.

Respectfully yours,
H. R. Vandiver, M.D.

BOOK REVIEWS

Books Received:

Manual of Clinical Laboratory Methods. By Clyde L. Cummer, Ph.B., M.D., F.A.C.P., Associate Clinical Professor of Clinical Pathology, School of Medicine, Western Reserve University, etc. Third edition, thoroughly revised. Illustrated with 173 engravings and 12 plates. 583 pages. Cloth. Price $6.75. Lea and Febiger, Philadelphia, 1931.

The Practice of Medicine. By A. A. Stevens, A.M., M.D., Professor of Applied Therapeutics in the University of Pennsylvania; Visiting Physician to Philadelphia General and University Hospitals; Consulting Physician to St. Agnes' Hospital, Philadelphia. Third edition, entirely reset. 1150 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1931. Cloth, $8.00 net.

The Surgical Clinics of North America. (Issued serially, one number every other month.) Volume 11, No. 3. (New York Number—June, 1931) 239 pages with 73 illustrations. Per clinic year (February, 1931, to December, 1931) Paper, $12.00; Cloth, $16.00. Philadelphia and London: W. B. Saunders Company, 1931.

Gonorrhea in the Male and Female. By Percy S. Pelouze, M.D., Associate in Urology and Assistant Genito-Urinary Surgeon at the University of Pennsylvania; Fellow of the Philadelphia College of Physicians, Philadelphia, Pa. Second edition, revised. 440 pages with 92 illustrations. Philadelphia and London: W. B. Saunders Company, 1931. Cloth, $5.50 net.

THE SURGICAL CLINICS OF NORTH AMERICA. (Issued serially, one number every other month.) Volume 11, No. 4. (Mayo Clinic Number—August, 1931) Octavo of 211 pages with 74 illustrations. Per clinic year, February, 1931, to December, 1931. Paper, $12.00; Cloth, $16.00 net. Philadelphia and London: W. B. Saunders Company, 1931.

TABLES OF FOOD VALUES. By Alice V. Bradley, B. S., Supervisor and Instructor of Nutrition and Health Education, State Teachers College, Santa Barbara, California. 127 pages. Cloth. Price $2.00. The Manual Arts Press, Peoria, Illinois.

FRACTURES OF THE JAWS. By Robert H. Ivy, M.D., D.D.S., F.A.C.S., Professor of Maxillo-Facial Surgery, School of Dentistry, Graduate School of Medicine, and of Clinical Maxillo-Facial Surgery, School of Dentistry, University of Pennsylvania; and Lawrence Curtis, A.B., D.D.S., Assistant Professor of Maxillo-Facial Surgery, Graduate School of Medicine, and School of Dentistry, University of Pennsylvania. 180 pages, with 177 engravings. Cloth. Lea & Febiger, Philadelphia, 1931.

Book Reviews:

A MANUAL OF CLINICAL LABORATORY METHODS. By Clyde Lathridge Cummer, Ph.B., M.D., F.A.C.P., formerly associate Professor of Clinical Pathology, School of Medicine, Western Reserve University, Cleveland, O.; Instructor in Dermatology and Syphilology, School of Medicine, Western Reserve University, Visiting Dermatologist Charity and St. Alexis Hospitals, Cleveland, O. Third edition, revised, 583 pages with 173 engravings and 12 plates. Cloth. Price $6.75. Lea & Febiger, Philadelphia.

This work is a manual for laboratory diagnosis and as such should be an excellent text book for students and a laboratory guide for technicians. It is unfortunate that the vast scope of the work does not allow the inclusion of alternate methods, other than those of the author's own choice, for this leaves out many excellent and perhaps preferable methods. For the purpose intended, it is up to date, thorough, clear and concise reminding one of the old Van Jaksch, "Clinical Diagnosis."

MODERN PROCTOLOGY. By Marion C. Pruitt, M.D., F.A.C.S., Associate in Surgery, Emory University School of Medicine. 404 pages with 233 illustrations. Cloth. Price $8.00. C. V. Mosby Co., St. Louis, 1931.

During the past several years the profession has shown increasing interest in the specialty of proctology. This has been the incentive for the publication of several new books on the subject as well as new editions of some of the older books. The present book is Dr. Pruitt's second one in this field.

Modern Proctology is a review in book form of some of the standard works on proctology as well as some of the recent literature on the subject. The books of Ball, Drueck, Hill, Hirschman, Montague, Pennington, Tuttle, and Yeomans have contributed greatly to the subject matter as well as furnished the bulk of the illustrations. The book is very well printed and the illustrations are good, a few being from the author's own experience. The author's literary style makes the book easy to read, and his system of paragraphing groups the material in a practical manner.

Chapter one deals with the anatomy and physiology of the anorectal region and is drawn from Cunningham, Ball and Pennington. There is some confusion concerning the anatomy of the anus and lower rectum. The illustration on page 25 is modified from Pennington, the author states. The pectinate line as given here bisects the anal canal. This is an error as the pectinate line is the junction of the anal canal and rectum. Chapter two gives details of making the examination and a few pictures of instruments. The chapters on anaesthesia, deformities, and constipation are well reviewed. Considerable space is given to magacolon. The author reports a case.

The chapter on anal fissure gives A. B. Graham's successful treatment as well as the technic of incision and excision. The different types of abscesses and fistulæ are well presented. The author gives several of Drueck's operations for complicated fistulæ as well as Drueck's operation where multiple internal openings are above the sphincters. The chapter on internal hemorrhoids makes interesting reading although the author devotes too much space to the injection treatment at the expense of operative technic. We agree with him that it is a waste of time and money to fool with electricity in the treatment of hemorrhoids. The author describes one of Buie's operations for internal hemorrhoids and also one of Hirschman's.

The usual discussion and treatment of pruritus ani, cryptitis, proctitis, and stricture is given. The author has devised a unique way to mark the sites of alcohol injections in pruritus ani. The chapter on tumors is perhaps the best in the book. It reviews the literature rather thoroughly, giving the usual operations, and the illustrations are very good. Colitis, ulcerations, incontinence, injuries, and diverticulæ also are discussed.

The book will find its greatest usefulness in the hands of those desiring a review of proctologic subjects.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

ELIXIR NO. 229 EPHEDRINE SULPHATE 2 GRAINS.—It contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1931, p. 177), 0.44 Gm. in 100 cc. (2 grains per fluid ounce) in a menstruum composed of alcohol, glycerin, sucrose and water, with flavoring agents. Eli Lilly & Co., Indianapolis.

VENTRICULIN, 100 GM.—Each bottle contains 100 Gm. of ventriculin (New and Nonofficial Remedies, 1931, p. 238). Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, August 8, 1931, p. 391).

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

KELLOGG'S RICE KRISPIES (Kellogg Co., Battle Creek, Mich.)—A ready-to-eat, cooked and toasted rice cereal flavored with malt syrup, sugar and salt. It is claimed to be a delicious cooked, easily digested cereal.

EMBO (PURIFIED WHEAT EMBRYO OR GERM) (General Mills, Inc., Minneapolis).—Wheat embryo or germ practically free of bran or other parts of the wheat berry hermetically sealed in cans. It is claimed that the product retains the food value and vitamin content of natural wheat germ or embryo which is not modified in manufacture by any heating, bleaching or other process. Unless otherwise prescribed it can be conveniently ingested with minimum loss of vitamin potency by mixing with cereals, vegetables, fruits, after these have been cooked. (*Jour A. M. A.*, August 1, 1931, p. 321).

MAZOLA (Corn Products Refining Company, New York City).—A canned refined corn oil. It is claimed to be a highly refined corn oil for baking and table uses.

TEA TABLE SANDWICH BREAD (SLICED) (Liberty Baking Company, Pittsburgh, Pa.)—A white bread made by the sponge dough method, in sliced loaf form. It is claimed to be a bread of good quality.

LIBERTY DELICIOUS BREAD (Liberty Baking Company, Pittsburgh, Pa.)—A white milk bread made by the

sponge dough method. It is claimed to be a bread of good quality.

Liberty Grade A Bread (Liberty Baking Company, Pittsburgh, Pa.)—A white milk bread made by the sponge dough method. It is claimed to be a bread of good quality. (*Jour. A. M. A.*, August 15, 1931, p. 463).

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of Accepted Devices for Physical Therapy:

Eveready Professional Model Carbon Arc Lamp.—It is designed for general radiation therapy in physician's offices or clinics. The lamp is mounted on a large rugged stand, equipped with rubber wheeled, ball bearing casters which permit the lamp to be moved easily over the floor. The Professional Model is designed to operate on 115 volt, 60 cycle, alternating current circuit through a standard outlet (base plug or wall plug). The lamp is claimed to offer three distinct types of therapeutic radiation; namely, infra-red, visible, and ultraviolet. National Carbon Company, Inc., Cleveland, Ohio. (*Jour A. M. A.*, August 15, 1931, p. 462).

Eveready Solarium Type Carbon Arc Lamp.—It is designed to administer therapeutic light treatment simultaneously to groups of patients. The lamp is designed to be attached to the ceiling. The length of the unit is approximately 3 feet and the width and depth depend on the number of units included in each lamp. It is claimed that the lamp provides a source of therapeutic artificial sunlight for group irradiation, the ultraviolet content being much richer than that of natural sunlight. National Carbon Company, Inc., Cleveland, Ohio. (*Jour. A. M. A.*, August 22, 1931, p. 541).

PROPAGANDA FOR REFORM

Use of Cinchophen and Neocinchophen.—In consideration of reports of untoward effects, it would be well to discontinue the use of cinchophen and to substitute neocinchophen for it. Even though neocinchophen owes its activity to cinchophen, it is so slightly soluble as to be almost tasteless, devoid of irritant action on the stomach, and of remarkably low toxicity. If cinchophen is prescribed it should be under its pharmacopeial name and not as "Atophan", which is more expensive and is marketed with unwarranted claims. If neocinchophen is wanted it should be prescribed under this name and not under the uninforming designation "Tolysin." In view of the serious though rare poisoning from ordinary doses of cinchophen, the use of this drug should be restricted as much as possible to cases in which other non-narcotic analgetics, such as salicylates, acetylsalicylic acid or amidopyrine, have been tried and failed to give adequate relief, and in which the suffering is sufficiently great to justify the risk. (*Jour A. M. A.*, August 8, 1931, p. 409).

Cultivation of "Common Cold" Virus.—The growing conviction that "common colds" are not due to any micro-organism thus far included in commercial vaccines, but to an unknown filtrable virus or group of viruses, is strengthened by the currently reported successful cultivation of bacteria-free pathogenic nasal filtrates. The work indicates conclusively that the filtrable agent associated with "common colds" multiplies or is multiplied in the embryonic tissue medium. (*Jour. A. M. A.*, August 15, 1931, p. 466).

The Kaadt Diabetes Treatment.—Reports are being received that a diabetic treatment is being sent out by the Diabetic Laboratories of Fort Wayne, Indiana, the material as sent to the patient by this concern being signed by C. F. Kaadt, M.D. A quart bottle of the medicine is sold for five dollars and the patient is asked to disregard the testing of urine for sugar. A request sent to Dr. Kaadt by the American Medical Association Bureau of Investigation, requesting that he declare the composition, did not bring this information. Instead it appeared by the reply that while Dr. Kaadt is willing to let laymen infer that he has a cure for diabetes and sells this remedy on the mail-order plan, telling diabetics that when using it, it is unnecessary for them to use insulin or diet, he is as yet unwilling to give the medical profession any information on the subject. This, in spite of the fact that he admits that he has used his remedy for nine years and that he has never failed to produce a cure. (*Jour. A. M. A.*, August 15, 1931, p, 479).

Arsphenamine and Neoarsphenamine.—Comparisons of the therapeutic value of arsphenamine and neoarsphenamine must take into account the difference of arsenical content, which is one-third higher in the case of arsphenamine than in the case of neoarsphenamine. Even allowing for this difference, it is quite generally conceded that arsphenamine as such is therapeutically the more effective than neoarsphenamine. The evidence for the efficiency of neoarsphenamine is conspicuously small. The most carefully investigated and reported clinical material has been treated with arsphenamine rather than with neoarsphenamine. One of the characteristics of neoarsphenamine, which will affect any attempt to estimate its gross clinical value, is the marked variability between different lots of the preparation even from the same manufacture. (*Jour. A. M. A.*, August 15, 1931, p. 480).

ABSTRACTS

ROENTGENOLOGIC STUDY OF DIAPHRAGM

During the past few years Samuel Brown, Cincinnati (*Journal A. M. A.*, Sept. 5, 1931), has made an attempt to study the diaphragm in the anterior and lateral positions. This study enabled him to recognize lesions of the diaphragm which entirely failed to show in the usual anterior view, and when shown in the anterior view their exact location was possible to determine by the two positions. This study also revealed the fact that the right diaphragm, though on a higher level anteriorly, is actually on a lower level posteriorly than the left diaphragm. It was also found that the elevation of the diaphragm due to a subphrenic abscess usually takes place posteriorly. The diaphragm is then found either on the same level throughout or even higher than the anterior portion of the diaphragm. In other conditions in which there is elevation of the diaphragm, the relative heights of the anterior and posterior portions of the diaphragm remain the same.

ANALYSIS OF SCHIZOPHRENIA PROBLEM FROM STANDPOINT OF INVESTIGATOR

R. G. Hoskins, Boston (*Journal A. M. A.*, Sept. 5, 1931), states that the major problem confronting the investigator in schizophrenia is to characterize more adequately the psychosis itself. The term "dementia praecox" is a notably loose one and may well comprehend numerous more or less independent syndromes. The term is, perhaps, comparable with the word "fever," which may signify pneumonia, typhoid, acute arthritis, or what not. It is believed that technics are now available for the definite characterization of the psychosis if it is an entity, or for the subdivision of the general group into valid subentities, if such exist. What is needed to these ends is the accumulation of an adequate number of quantitative data on the various aspects of the disorder, and sufficiently searching statistical elaboration of the data to permit recognition and segregation of the characteristic, as

contrasted with adventitious, phenomena. Much more rapid progress in research is to be anticipated if one deals with entities as such. If or when the possibility is realized of segregating the general mass of schizophrenic patients into explicit subgroups, no doubt the strategic aspects of the problem will change. Over-frequent annoyance of the subject with a variety of trying diagnostic procedures is undesirable; his recovery might be impeded thereby, and if he were kept in an overwrought condition, the various observations would not be representative. Actually, the number of procedures in which a given patient can participate without significant detriment must be determined in each case individually. It is not essential to insure statistical utility of the data that each patient be represented in all series of observations, provided systematic overlapping is practiced and an adequate number of individual observations are made.

APPRAISAL OF PRESENT TREATMENT OF DIABETES

According to ELLIOT P. JOSLIN, Boston *(Journal A. M. A.,* Aug. 29, 1931), the present treatment of diabetes is better than is often thought, and, therefore, one should be slow to depart from standard methods. The average patient who consulted him in January, 1931, had already lived half again as long (6.1 years) as his confrere of January, 1922. Indeed, judged by the duration of his disease the average diabetic patient in January, 1931, would have been dead in the January prior to the discovery of insulin, because at that time the total span of life of the diabetic patient did not exceed six years. Furthermore, this January's diabetic patient was older by eight years, his average age being 50 years instead of 42. The proportion of males had decreased to 44 percent in contrast to 47 percent in 1921 and 55 percent a decade before, again illustrating the remarkable change that has taken place in diabetic sex distribution. The first year of diabetes is now the safest for the patient, whereas formerly it was the most serious. First year mortality cannot drop much lower than the 4 percent it has now reached, because so many cases are encountered in the aged. Today every physician realizes that coma is an accident or the result of neglect, and, although arterio-sclerosis has largely taken its place in diabetic mortality, diabetic gangrene, which is its most common expression, occurs almost exclusively in the ignorant and indigent, so effective has been prophylaxis. A growing percentage of diabetic patients now outlive their life expectancy and a leading insurance company acknowledges that, since the discovery of insulin, diabetic mortality has decreased in the young and that its rise in the old is largely to be explained not by an increase in the disease but rather because of an increase in the total number of known diabetic patients. Soon, even if not today, one can say to the patient developing diabetes in 1931 that the chances are certainly 1 in 10 and perhaps 1 in 5 of his living longer with diabetes than will his average neighbor of the same age without it. Since the average duration of diabetes in the average living patient is now so much greater than that in the recently fatal case, the problems of treatment are new problems and must be recognized as such and met with an open mind. An unexplored diabetic land lures one on. With the wide divergence in types of treatment now in vogue, physicians and patients can easily become hopelessly confused unless fundamentals are emphasized by all.

MATERIAL FROM LIVER ACTIVE IN PERNICIOUS ANEMIA

RANDOLPH WEST *and* MARION HOWE, New York *(Journal A. M. A.,* Sept. 5, 1931, call attention to the fact that the chemical evidence at present available suggests that material from liver active in pernicious anemia consists of one or more pyrrole precursors, which may be utilized by the body in the formation of hemoglobin and possibly other cellular respiratory pigments. It must, however, be emphasized that, although clinical activity has been present after two and three recrystallizations of these quinine salts, the possibility of the presence of highly potent absorbed material can be wholly excluded only when these products have been synthesized. This conception of the function of liver feeding in Addison's anemia raises several points of both theoretical and practical interest. There is a great loss of active material entailed in chemical purification by present methods. Maximal clinical responses of the purest preparations have necessitated the intravenous use of material derived from approximately 40 Kg. of liver, while Castle and Taylor have obtained similar responses with a less refined intravenous preparation derived from 100 Gm. of liver, an amount wholly inadequate when given by mouth. This observation implies either poor gastro-intestinal absorption or considerable destruction in the intestine, probably by bacteria. It is of interest that the pyrrolidone ring, which is present in the substances that have been isolated to date, is readily destroyed by bacterial action, while the rings of the other cyclic amino acids are relatively resistant. The blood picture simulating that of Addison's anemia found in partial intestinal obstruction and in infestation of the intestine with *Bothriocephalus latus* may well depend on destruction of the active material by bacteria or parasites.

EPITHELIOMA OF THE FACE

GORDON B. NEW and FRED Z. HAVENS, Rochester, Minnesota *(Journal A. M. A.,* Sept. 5, 1931), believe that primary complete removal of epitheliomas of the face by surgical measures, including surgical diathermy, is the treatment of choice. For the treatment of inactive lesions, the growth may be excised or removed by surgical diathermy; the tissue removed may be replaced by a full-thickness skin graft or a pedicled flap, at the time of the primary operation. Active lesions, frequently recurrent lesions, and regions which have been subjected to radiation with involvement of cartilage or bone are best destroyed with surgical diathermy, the deformity being disregarded. Reconstructive surgery should be delayed for at least nine months to a year. The gland-bearing fascia which drains the primary lesions should be removed in cases of carcinoma of the lower lip.

MASSIVE DOSAGE OF LIVER EXTRACT IN PERNICIOUS ANEMIA

JOSEPH E. CONNERY, New York *(Journal A. M. A.,* Aug. 29, 1931), treated six persons with pernicious anemia with single massive doses of liver extract. Hematologic and clinical improvement followed in all cases. In three patients there was satisfactory agreement between the estimated and the calculated concentration of reticulocytes. There was a satisfactory explanation for the lack of agreement in two of the other three patients. From the initial level of the red cells the maximum increase of erythrocytes could not be predicted. The administration of single massive doses of liver extract was without significant effect on the systolic and diastolic blood pressure and on the blood sugar content.

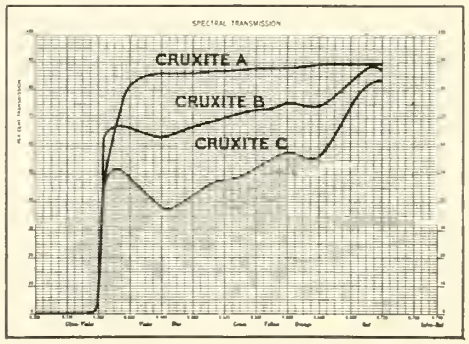
PERIODICALS FOR MEDICAL LIBRARIES

R. L. JENKINS, Chicago *(Journal A. M. A.,* Aug. 29, 1931), believes that the utility of a medical library depends not only on the funds expended for the purchase of books and periodicals but also on the wisdom of the selection. He presents a table which, based on the tabulation of more than 6,000 references to periodicals from the medical literature, probably represents a fairly good

(Continued on adv. p. xx)



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ABSTRACTS

(Continued from page 588)

index of the relative importance of the fifty leading medical periodicals. These fifty periodicals represent two-thirds of the citations from a selection from THE JOURNAL, the *British Medical Journal* and the *Klinische Wochenschrift*. In equipping a medical library on limited funds, it is in general better policy to purchase a wide selection of current or recent numbers of periodicals rather than more complete files of a more limited number of periodicals.

SUCCESS IN PUBLIC HEALTH RESEARCH

FRED O. TONNEY, Chicago (*Journal A. M. A.*, Sept. 5, 1931), discusses the question of how the ordinary routine public health laboratory may successfully enter the field of research under the too common handicap of inadequate facilities, pressure of routine work and, perhaps, lack of official administrative foresight and sympathetic support. He believes that the essentials to success in this venture that should be given emphasis are: (1) cultivation of the research point of view; (2) treatment of the staff; (3) treatment of the problems; (4) provision of scientific contacts, and (5) methods of securing publication. The growing health needs of a great community give rise to many demands for practical research in problems concerning public health and in Chicago only a few such demands can be met with the facilities now provided by the municipality. Yet enough has been accomplished to show by specific example the urgent need and ultimate economy of adequate or even liberal provision for research in public health by the community itself. Surely the time is ripe for the establishment of a public health research laboratory commensurate with the needs of the metropolitan area; a complete and fully equipped modern laboratory, housed in a specially designed building of ample capacity, situated in a central location, equally accessible to all sections of the city, to the business district, and to the administrative offices; a laboratory planned not only for immediate needs but for the emergencies of the future, and manned with an adequate staff of trained investigators working consistently for better health conditions.

PROPHYLAXIS OF RINGWORM OF FEET

EARL D. OSBORNE and BLANCHE S. HITCHCOCK, Buffalo (*Journal A. M. A.*, Aug. 15, 1931), report a method for the prophylaxis of ringworm of the feet which has proved satisfactory as judged by fungicidal tests in the laboratory and from practical experience in the high schools of the city of Buffalo and in many other public and industrial institutions. About a year ago it was suggested to one of them that it might be worth while to test out the fungicidal activity of sodium hypochlorite, the common, cheap and harmless bactericide used in most city water supplies. They at once tested out the fungicidal activity of this chemical to five common types of fungi found on the feet of persons suffering from ringworm. From these tests it was evident that a solution of 0.5 percent sodium hypochlorite should kill all the common fungi found in ringworm of the feet with exposure of fifteen seconds to these organisms in a watery suspension. Fresh moist deposits of ringworm organisms on the feet should therefore be killed with 0.5 percent sodium hypochlorite, provided the organisms have not penetrated to the deeper cells in the horny layer of the epidermis. With the experimental data at hand, the T. A. Patterson Laboratories supplied the Buffalo high schools, at cost, with sufficient rubber pans and sodium hypochlorite solution to carry out this method of prophylaxis for a period of one year. The company had a special rubber pan prepared whose inside measurements were two feet on a side. These pans were made of heavy rubber and weighed approximately sixty pounds. One pan was placed on the floor of the corridor between the dressing rooms and the shower baths and another pan was placed at a point past which all the pupils had to pass just before putting on their clothes. The pans were filled up to the two-inch mark with 0.5 percent sodium hypochlorite solution and this solution was changed every morning. Although the solution was never diminished to such an extent that a refill was necessary, it was evident that a large number of persons stepping in and out of the pan on the way to the shower bath might gradually deplete the solution. A slight, but not appreciable, dilution of the chemical occurred. In order to allow for this dilution and for a fair margin of error, the authors have recently recommended the use of one percent sodium hypochlorite instead of 0.5 percent solution. Up to May 2, 1931, this method of prophylaxis has been employed in the Buffalo high schools for a period of from nine to twelve months. The physical directors of each school have been carefully advised regarding the method and the checking of results. All the complaints have been transmitted to the director of physical education of the Buffalo public schools. He stated that in former years a great many complaints were received and that many new cases of ringworm of the feet appeared each year among high school students. The director of physical education of the public schools of Buffalo reported that this year he had not received a single complaint from parents or pupils because of the appearance of ringworm of the feet. The various directors of the different schools have been well informed on the disease and have been unusually alert in the detection of new cases. None were reported for the entire year. In private practice the authors have noticed a drop in the incidence of new cases of ringworm of the feet in high school pupils of the city of Buffalo. Their records fail to show a single new case, although numerous ones have appeared from the surrounding towns.

DIET IN INTESTINAL DISORDERS

According to J. ARNOLD BARGEN and SISTER M. VICTOR, Rochester, Minn. (*Journal A. M. A.*, July 18, 1931), much confusion exists concerning foods to be eaten by persons who have intestinal disturbances. It is forgotten that the principal function of a major part of the large intestine is storage, that some absorption takes place in the right half of the colon, but that most of the digestion and absorption occurs in that part of the gastro-intestinal tract which is above the colon. The amount of confusion in regard to this is often startling, and it is not unusual to find people following totally inadequate diets for various actual or presumptive pathologic conditions. This is particularly emphasized when patients with inflammatory diseases of the colon present themsleves for examination or observation. It is also forcibly brought to attention by the vast number of unfortunate persons who suffer from so-called irritable colon, with diarrhea of indeterminate origin, or constipation and intestinal flatulence. Perhaps too much attention has been paid to the food of patients with intestinal dysfunction. This view has its proponents and its antagonists. Primarily, many internal abdominal disturbances have been called colitis in which there was no demonstrable inflammation of the large intestine. The terms "mucous colitis," "spastic colitis," and many others, are badly chosen because they do not stand for colonic disease but rather for a single phase of a general bodily derangement, of which the basic phenomena are in the nervous system. Hence, in commenting on diet in intestinal disorders, there must first be a cleancut picture of the conditions for which such diet is advised. The authors outline helpful suggestions relative to diet for certain chronic ailments which afflict the intestine of man, such as chronic ulcerative colitis, diverticulosis and mild diverticulitis, malignant disease in its preoperative phase and certain postoperative complications. Also, they include the diet for persons who have undergone colostomy, and a few pertinent facts on the "irritable colon".

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ORIGINAL ARTICLES

A FEW OF THE PROBLEMS OF THE MODERN DOCTOR*

E. H. CARY, M.D.
DALLAS, TEXAS

I come to you with the deepest appreciation of the courtesy shown the president-elect of the American Medical Association, your humble servant, who has the distinction of having been selected by you to this high office. I consider it my duty and privilege in the next two years to carry the fine sentiment of friendship of the headquarters to the rank and file of the membership of the American Medical Association.

When invited to speak to you, the choice of subject was left to me. First I thought of presenting a scientific paper, then I realized that I could not select a topic in my field which could possibly interest this large and varied group. So I hope for a time you will turn from the distinctly scientific aspect of medicine.

I recognize the appeal one can always make to an audience when the ideals of a great profession are placed in review, glorifying both the men who have espoused them and the traditions and virtues dear to us all, but I have the feeling that you want to know what this new man whom you have so recently honored has in mind, and if there should be anything worth while, you want to find out about it. I realize that the term "materialist" may be attached to the name of anyone who discusses the practical phases of professional life. On my own behalf may I be permitted to offer the record of the past thirty years of devotion to the furtherance of scientific truths and ideals.

When the American Medical Association, this great organization of ours, was democratized, and each state could, through duly elected delegates, express the will of the units which make up the whole, the machinery was at hand to develop on this continent the ideals of the noblest of all professions. Educational improvement became the great motif that ran through years of constructive planning until our standards and practices equaled, and in many instances surpassed, those of other enlightened countries. From within the medical profession came suppression of the evil of widespread commercialized medical colleges, of which many were bad. Some of them were good on account of their great clinical teachers. This educational uplift was aided through widespread publicity by the Carnegie Foundation. We, as a profession, at that time commanded no such avenues of publicity. It was a reform engineered and made effective by the medical profession, encouraged by enlightened public opinion. There were then many great doctors, and particularly famous surgeons, in spite of low standards, but they were exceptional.

Undoubtedly we are now confronted with a far better average product, which is the result of standardization. There has grown to be a widespread conviction that medical men are now rather uniformly exposed to the medical sciences, as well as having similar clinical experiences. Personality, keen mental perception, philosophical attitude, interest in patient, that so-called rare quality known as "horse-sense"—these and other human values are not necessarily created in the medical school, and you cannot standardize the profession, for there will always be the normal human differences. I must call your attention to the fact that the executive officers of every class "A" medical school now have the privilege of choosing from a large group the men who are to make up the freshman class, and since migration of students is not encouraged, those who weather the storm stick. Their quality is established under longer surveillance. I also call your attention to the fact that students are sought routinely and naturally among the applicants for their educational and moral values, without particular thought or interest in the material side of their professional career, but it all in time tends to produce in practice a leveling of talents at work with returns fairly equalized.

The individual hundred-thousand income these educated young men have heard about is rapidly disappearing; so is the seven hundred and fifty-dollar yearly stipend. There is now an approximate monetary level which is to be expected. The science of medicine is, in spite of this general improvement of its devotees, always ahead of the

*Presented at the annual banquet of the Indiana State Medical Association, Indianapolis, September 24, 1931.

art of medicine. You will say at once an excellent reason for the existence of this great organization of ours, the American Medical Association, which is needed to provide the means and facilities for carrying into the office and home, through its publications, invaluable information. We may add that there is also through our associational contacts an assimilation of proven facts and further trial of reasonable clinical conclusions, which are heard and later utilized in a professional way.

The education of physicians, the process of keeping them educated, is in a way "big business", and however objectionable the term once seemed to all of us, even so meekly applied, we are now able in our profession to perceive material values and remain idealists, as the successors to the Victorian period came to mention the leg of one's body without offense to the proprieties. Of course, the danger to our profession is that universal danger. When repression is removed, the unmoral rebound disgustingly.

I have sometimes suspected that the older practitioners whose virtues have been recounted in song and phrase (God bless them) realized their deficiencies to such a degree that they were governed accordingly. They made no financial demands—they simply accepted what came. This custom involved even those who gave tremendously of their knowledge and skill. Even unto this day, the people in many places are trying to follow the old custom—the dear old custom of commanding their doctor with the thought that some day they would get another if they were disapppointed in the utter altruism of this fine servant of the people. This old custom, likely Spanish as well as American, has lost favor with that influx into the profession of the newly and more expensively educated men. They seem to feel that they have something for sale which has required time, money and labor to acquire. They too want to provide for their families. Have they changed their code? Have they ceased to want to care for the indigent? I can say decidedly, "No". But it is fair to state that the profession is beginning to see in the public a joint partner in altruism. As time goes on we should insist that for the conservation of the doctor's and the patient's time and in the interest of the best scientific service all inclusive conveniences should be provided more uniformly for the treatment of the sick. With this as a working basis, the profession will further insist upon a line of demarcation. On one side voluntary charity, and on the other, a fee commensurate with service performed, and the ability of the patient to pay.

As to charity, the members of our profession consider it a great privilege to care for the worthy poor. They properly ask for a correct environment with modern facilities for the conservation of their valuable time. In Iowa there are fifteen county medical societies handling on a general contract basis the sick poor of the county. This plan has been in operation over a period varying from one to twenty-seven years. Professional and public opinion now justifies the assumption of this obligation by the public, the medical men being paid for the care of all indigents.

Again we should become joint partners of the public for the relief of the so-called middle class, whose interest has filled so many journals. They must be considered. This middle class is made up of people with varied resources; they want the best medical service at reduced cost. They have many obligations, likely interesting families; they are quite respectable in the community. Unfortunately their income is often not quite equal to all the demands; then comes illness and the danger of being financially submerged if any unusual hospitalization or surgical procedure is required.

Certainly there should be no difference in service so far as diagnosis is concerned in any one of the so-called strata-poor middle class, and the rich. We recognize that the greater percentage of simple illnesses terminate favorably, regardless of diagnosis. This offers an equal opportunity for praise, regardless of the merit of the doctor. We for the moment are not interested in these numerous incidental ailments, but if we, the better educated physicians, see that the diseases of the really sick are diagnosed correctly; that we accurately interpret the illness of the ambulatory, yet potentially sick, and that we make a minimum number of mistakes in our interpretation of disease, then that vast number of those not so sick will more likely remain at all times in the hands of the regular physician. Hence, it is all-important that we plan to provide for this numerous middle class. An intelligent self interest on our part suggests that we see that it is done. One of the reasons why it is not done is that the people who are unable to pay very much seek cheap medical advice. In the long run they have paid dearly, but they do not understand this. We should so develop the sympathy of the membership of the county societies that the efficiency of the profession is made available for diagnosis regardless of class. The time is probably at hand when organized medical units of the A. M. A. should participate actively in the social service programs of our communities. In fact we should lead the way.

This cooperation of the profession should contemplate that the laboratory and hospital facilities in county and city hospitals offer part pay opportunities provided by the public on a reduced basis for the benefit of that part of the public who are in distress, and for the particular benefit of the people whose budget justifies this cooperative service, and whose self-respect makes them abhor charity.

The county society must be the place where its members can determine for themselves the wisdom of more frequently combining their knowledge for the benefit of all classes, whether rich or poor. The members can develop a plan, they can be more accurate, they can utilize private laboratories wherever they exist, if the laboratory men are willing to cooperate with the profession

in this diagnostic work. If for any reason this arrangement cannot be made, then the public should supply such opportunities.

The county medical society can well afford to give thought to any method which encourages individuals to try honestly to do their part.

Patients in large cities who go to hospitals or dispensaries for charity should be registered so that medical shopping or duplication of effort of all kinds will be discouraged.

To advert to the modern medical man—he should know his limitation and be honest enough to admit it. In doing so he must learn the art of cooperation and the value of consultations with his fellow practitioners. Cooperation is essential and more enduring where the professional contacts are established without actual partnership, and where the frailties of human nature are not strained. Self interest binds one to the patient who remains in hand, but intelligent cooperative consultations as may be needed hold the patient on account of actual service rendered.

Now it is quite evident that right here individualism in the practice of medicine falls down. Let us assume that cooperation is largely needed in diagnosis. Since correct diagnosis is most important, then every doctor should use wisely the best men for that purpose. To do this at the home of the patient seems impractical and too expensive, for it takes more time to make the necessary examination. So the patient whose condition requires a careful analysis must be where the physician can easily cooperate, whether this be a general hospital or the place provided within the building where the doctors have their offices, and where they often jointly own expensive equipment. Here conservation of time and use of laboratory facilities, x-ray, etc., make it possible for an early conclusion to be reached at a minimum expenditure. This can be in one fee consistent with the ability of the patient to pay—the patient to remain in the hands of his individual physician.

It is easy for us to understand that the most expensive medical service that can be rendered to any man or woman is an incorrect diagnosis. Inasmuch as a certain percentage of every man's practice requires the most careful analysis to determine the cause of trouble, then we must stimulate this methodical, cooperative effort on the part of the profession to see to it that their patients are studied thoroughly, and that the method of doing so is to the mutual advantage of the consultants. The patients, yes, even the people, should know that the fee for such services will not be burdensome.

I am discussing the present-day doctor, well-educated, who has remained an individualist, for out of the 140,000 there are less than two percent practicing group medicine.

Correct medical service is based upon correct diagnosis. If this were accomplished, there would be less complaint and fewer reasons to support the irregulars. Every county society should consider this relation of the profession to its clientele.

Billings has said that "A painstaking general practitioner is able to, in a great majority of cases, make an accurate diagnosis without expensive equipment". The plea is made to stimulate more individual effort, to discourage leaning upon laboratories and hospitals, as well as the overuse of specialists. This is fine to preach to the timid practitioners, if there be any who have no opinion, and who await laboratory findings to formulate one, but is it not more likely from your own observation that doctors err on the other side, taking the path of least resistance, often jumping to conclusions, or delaying a complete study? For this doctor is without a plan of cooperation which to him is practical. The patient is treated expectantly as long as he remains sufficiently impressed, and is correspondingly in his care.

I am suggesting to the profession that they sensibly supply to each other the missing link of knowledge, so worked out that it is in no way harmful to the practitioners nor to their patients, and which is in the long run to the interest of the medical profession as a whole. The term "practitioner" should suggest to you the medical man needed in a given case.

A former president of the A. M. A. advocated that the county medical societies should organize and conduct a group clinic. His argument was based upon the fundamental grounds that the practice of medicine was a natural monopoly and that if we did not supply to the people competent medical service at a cost within their means, the state would do so eventually. Not differing with Dr. Harris as to the fundamental obligation of the profession, I have always thought that the county society as such would be unable to proceed successfully along the lines suggested.

I claim that the doctors themselves need to combine their talents as needed to meet conditions as presented. In smaller counties the county-city hospital should be the environment for developing medical diagnostic and even curative work. Larger cities offer more numerous foci of professional activities—the public and private hospitals are being used, but not routinely, as they should be. Then there have been numerous medical buildings in the larger cities, placed at the service of the profession, where the greatest opportunity is now presented to develop this cooperative spirit of helpfulness toward a correct diagnosis. Help is not always needed, and then too it may only be necessary to call one or two more highly trained men in given lines, the patient always remaining in the hands of his doctor. The so-called high cost of medical service will disappear when we more or less universally adopt cooperative methods, which I could easily explain.

To pursue this thought of efficiency we are often confronted with embarrassing expenditures due to unwise counsel at a time when sentiment is regnant. The modern doctor is confronted with an

unique psychology which he unwittingly helped to create.

While I yield to no one in my admiration for the many marvelous women who have gone into the great profession of nursing, it is true that in hospitals and in homes, but largely in hospitals, the man who often can least afford it is employing special nurses. There has been an over-emphasis in what might happen if the patient were without such constant care. There has certainly been an over-emphasis upon the social importance of having one's wife as well cared for as the "Joneses".

It would seem that the medical practitioner could very well afford to hand to the patient who contemplates hospitalization a frank statement containing some valuable information as to the important things needed while in the hospital. This card could carry suggestions which would practically eliminate that combination of circumstances surrounding patients in hospitals, which creates a feeling on the part of the patient and his family that special care is imperative. The doctor should remain the sole judge as to when this frequently necessary expense is needed.

In the same way medical men should be wise enough to know when to use laboratories of all kinds. While I do not in any sense decry their value that which is not necessary often becomes a very great burden.

What I am trying to say is that within the profession we must practice discretion in the methods we pursue; we must see to it that our patients are protected from unnecessary expense and have them satisfied if it is within our power to do so. I am sure you realize that the rich appreciate a considerate attitude on our part and gladly pay when it is apparent that this is true.

To the next Congress of the United States we should turn our attention, for another pressing issue which confronts the profession is the paternalistic demands upon the state and upon the national government. This will have little effect as it relates to us if we have used our knowledge wisely and conducted our economic relations with the people considerately.

You will find increasing interest in the Shoulders resolution introduced in and passed by the House of Delegates of the American Medical Association at the Philadelphia session last June. This is a constructive effort to spread the benefits of federal aid to the veterans of the World War with non-service-connected disabilities. This resolution petitions the Congress of the United States and the American Legion to abandon the policy of rendering hospital and medical benefits to veterans of the World War with non-service-connected disabilities and substitute therefor a plan of disability insurance which provides cash payments during the period of total disability with liberal hospital benefit to cover hospital expenses for a veteran during period of hospitalization for any disability.

If the government pursues its present policy it is estimated that there will be an expenditure of two hundred and twenty-nine million dollars per year for the cost of two items alone, besides other items contemplated, many of large import.

These two items are hospital maintenance and professional staff. To contrast the far-reaching suggested insurance benefits to the non-service disabled, their hospital expense and family protection would be only ninety-two millions per year at its height. And with this arrangement the medical profession will be sought for its service as now, the patient using the home physician. Our profession and the hospitals of the land are vitally interested in preserving their relations with this large group of citizens who should remain independent and able to choose their own physicians and hospitals. While it is true there would be temporary employment for staff officers where government hospitals are built, the tendency to state medicine would be encouraged greatly and react destructively on the present system of individualism in the practice of medicine. To quote Shoulders, "This insurance plan of benefits to the veterans is offered in the interest of all; it is in the interest of the veterans primarily; it is in the interest of equality of benefits between veterans; it is in the interest of economy in governmental expenditures; it is in the interest of democracy in medicine—that system which has brought to the people of the United States the highest type of medical service to be had on earth."

It is to be hoped that the American Legion will adopt the plan as theirs, inasmuch as it is to their interest, and while we recognize the fact, it is also to the interest of every medical man in this country to preserve the present system of practice. The present plan of the government, if carried out, will eventually wreck the hospitals of this country. The taxpayers should become vitally interested in any other plan that is constructive, while humanitarian as well as economical.

Medical men should be able to exert a tremendous amount of influence, not only for the public good, but to avoid pernicious legislation which is harmful to both the public and the profession.

While I am sure that we with one accord gladly would see the proper hospitalization of every veteran who needs it, and while there is not a medical man who would not protect and serve without cost if it were necessary, any veteran, if that veteran were unable to take care of himself, yet our profession should stand with every economic force in this country to protect the resources of the country and to protect themselves from that onslaught which is being constantly made to widen the doors of hospitals, not only to veterans who could justly claim hospitalization, but to those whose self-respect should restrain them.

In this connection it may not be amiss to call your attention to the readiness of the National Federation of Federal Employees, now numbering about six hundred thousand, exclusive of judiciary,

army, navy, and other personnel which is large and would bring the total around a million. This federation is watching intently the development of the present plan of building large veteran hospitals and will soon demand for themselves and families hospitalization and professional care—all told about two to four million people may be expected to ask for such increasing service. The doctors will become divided into classes, government doctors and common doctors. Taxes will be high, medical service will be lowered.

Strike hard against any such socialistic propaganda, against such socialistic realizations. You owe it to yourselves and the people whom you serve. We should oppose this ever-increasing demand that not only the veterans but their families and finally all government employees should have the benefit of this widespread raid upon our country's treasury.

The future usefulness of our profession is vitally wrapped up in rational methods of practice. As an organization we must stand for those principles which underlie the structure of our government, and cooperate with those intelligent forces which oppose bureaucracy with its tendency to destroy individualism in this country. The modern doctor is the recipient of all that has come through the ages. The people are his friends to aid and protect. Great is the profession in cumulative knowledge. It must wisely and beneficently distribute the blessings it has to bestow. The people must respond in good faith, for in medicine there are no overlords. None so great that he may not fall, if he turns his face from the main object—the service of humanity.

EARLY PROSTATECTOMY*

Ernest O. Nay, M.D.
TERRE HAUTE

In reviewing sixty-five consecutive cases of prostatic obstruction that have come into our clinic in the last five years I was rather surprised to find that the average age of the patient was seventy. Ninety-one percent had acute retention. Fifty percent had complete retention. Eighty-one percent had symptoms which had extended over two years before operation, and, incidentally, forty percent had been seen by a doctor one year before coming in. Thirteen percent had carcinoma, and the mortality for the simple opening of the bladder was eighteen percent, while the mortality for prostatectomy was only 4.5 percent. Keyes reported the mortality in a series of 102 cases of simple cystostomy at Bellevue Hospital to be thirty-two percent, and, in reviewing the literature, I found the mortality of other men corresponded closely to this. It is ridiculous to think this mortality is due to the suprapubic cystostomy. In looking for the causes of this mortality, this paper was suggested.

A prostatectomy should no longer be an emergency operation but an operation of choice. Why has it been an emergency operation? There are many contributing factors, but the most important are:

1. The hope of a spontaneous recovery, or recovery by medical means.
2. The attitude on the part of the family physician and friends.
3. The fear of the loss or diminution in sexual desire.
4. The fear of the operation as to mortality.
5. The feeling that the operation will not be a success from a functional standpoint.

The belief in spontaneous recovery rests on a wrong diagnosis, based by the patient himself on the example of a friend who apparently had the same frequency and retention and who recovered without surgery. Of course, the friend had an infection of the genito-urinary tract which produced an inflammation of the neck of the bladder that caused his obstruction, and when the infection subsided, normal urination resumed.

Patients suffering with true adenoma of the prostate will many times have long remissions from symptoms. Yet these periods of relief only allow the patient to grow older and thus become a greater surgical risk. So far as I know, no one has decreased the size of an adenoma of the prostate or relieved the obstruction caused by an adenoma by the use of massage or any other nonsurgical means.

There are some facts to be taken into consideration in regard to the attitude of some of the family physicians concerning prostatectomy. Until the last few years the general mortality of prostatectomy was above twenty-five percent. This was high, and the family physician would think twice before submitting his patient to this operation. He knew that without an operation, and with a trusty catheter, the patient would live on an average of two and one-half years and then die in peace from infection and uremia. However, a number of cases would require some type of bladder puncture from which the mortality was thirty-two to fifty percent. With such a mortality the family physician would not send in his case for operation until it was impossible to relieve him otherwise, thus making an emergency prostatectomy.

Too many patients are still being advised that prostatic disease is a natural and necessary accompaniment of advanced age, something which must be accepted and patiently endured. This teaching is very harmful. No matter what a man's age may be he still desires the same indefinite number of years ahead of him. He makes plans for a long term of life. His normal functions and freedom from discomfort are important to him. Any operation that can increase the length of his life and give him a normal or nearly normal function is justifiable.

*Read before the Indiana State Medical Association at Indianapolis, September 25, 1931.

Some hold to the idea that a prostatectomy in some way interferes with the sexual function and that as a result of this operation there is a loss of manly vigor. Patients who are potent before the operation are potent afterward, and not infrequently they report an increased sexual vigor as one of the good results of the operation. Certainly the number of men who find sexual vigor increased by the operation greatly exceeds those who experience the opposite effect.

As stated above, the mortality of prostatectomy twenty years ago was above twenty-five percent. Now, however, in well-organized urological clinics this mortality is between four and ten percent. This achievement has been obtained by a number of factors, chiefly preoperative drainage, earlier operation following onset of symptoms, technic, anesthesia and postoperative care. Preoperative drainage, technic, anesthesia and postoperative care have been worked out very thoroughly but one finds very little in the literature in regard to the early prostatectomy, that is, operation soon after the onset of symptoms and before the patient has reached the stage of crumbling senility.

It is true, adenoma of the prostate bears a definite relationship to age. The symptoms usually become noticeable between the ages of fifty and sixty, but it is certain that enlargement begins earlier. Yet the average age at which prostatectomy is done now is about seventy. This is the age of physiological decline. We know that to operate upon a patient in the seventh decade of life or thereafter is undertaken in the face of diminished circulatory reserve. In the younger individual in the absence of cardio-vascular disease, the circulation with the aid of its compensatory mechanism is adequate to meet the most varied demands. With advancing age, however, coincident with degenerative changes in the blood vessels and myocardium, the functional reserve gradually decreases. The arteries become more or less sclerosed and lose their elasticity. The myocardium may show hypertrophy or fibrosis. Hypertrophy is the normal response to the increased work required to maintain an adequate blood supply through narrow inelastic arteries. Unless the valves are damaged or the resistance in pulmonary circulation is increased, the enlargement is in the left ventricle. The aorta dilates in the region of the base and arch, and there is a sclerotic narrowing of the coronary arteries. Whatever may be the anatomical results of such changes the inevitable physiological effect is an impairment of the capacity of the heart to meet the increased demands. The heart's efficiency depends upon the integrity of its metabolism. This presupposes an adequate blood supply to the myocardium in proportion to the load placed upon it.

The normal vital capacity of a patient falls steadily during the sixth and seventh decades of life and thereafter until at eighty it is only fifty percent of the normal at thirty years of age. Following an operation this reduces still further. Thus it can be seen at a glance that if we want to lower the mortality and save the heart and kidneys we must operate before seventy years of age because prostatectomy will not restore a previously ruined kidney or correct the widespread vascular changes which have taken place. The alternative is early prostatectomy. Can this be done?

I think that if anyone who is doing prostatic surgery will take the time to review his cases in regard to mortality and morbidity in the various ages he will find that he has had very few deaths up to sixty-five, and also that the functional results of these early cases have been good, the general health being so good that a number of them have lived from ten to twenty-five years following the operation. In other words, the renal and cardiovascular systems of these early cases were not injured by old age.

Seng, in a series of 502 cases, had sixty deaths which demonstrate my point in regard to age and mortality. I will quote his figures:

AGE	CASES	DEATHS	MORTALITY
50—60	100	4	4.0%
60—70	245	24	9.7%
70—80	142	26	18.3%
80—90	15	6	40.0%

It can be seen that during the ages of 60 to 70 the mortality was 9.7%, which is twice that of the previous decade of 50 to 60, and that between 70 and 80 the mortality of 18.3% was twice the previous decade of 60 to 70. Comparing further, the mortality for 80 to 90 was 40%, which is ten times that of the decade of 50 to 60. It seems to me that age is playing a real factor in the mortality of prostatectomy when we look at such charts.

Perhaps the most important factor influencing the mortality and morbidity of prostatectomy is the time that elapses between the onset of symptoms and the operation. It has been the tendency for patients to have symptoms of obstruction for from two to ten years before operation. My own series shows that eighty-one percent had had symptoms over two years. What has happened during this interval? These cases go through a period of obstruction, chronic retention, with resultant back pressure on the kidneys, which in turn causes such cardiovascular changes as hypertrophy of the heart, coronary sclerosis, myocarditis, and finally decompensation. They come in with complete retention, and, when a suprapubic cystostomy is done, preparatory to a prostatectomy, thirty-two to fifty percent of them die. Why? Simply because the operation was too late. Too much damage had been done to the cardiovascular, renal and other systems. In other words, the patient waited until he had ruined his entire system and then came in for an emergency operation.

Swan published an article in which he stated that out of 170 prostatectomies done at the Massachusetts General Hospital, in the last three years there was a definite tendency for patients to submit to operation earlier after the onset of symptoms, and that as a result the mortality had de-

creased from 18.8 to 5.8 percent. A chart made from his statistics follows:

	Duration of Symptoms Over Two Years	Acute Retention	N. P. N. —Over 40%
1926 1927	66 2/3%	48.9%	53.8%
1928 1929 1930	50%	36.6%	34.0%

This chart shows that for the first two-year period 66.6 percent of the patients entering the hospital had had symptoms over two years, 48.9 percent had acute retention, and 53.8 percent N. P. N. above 40; while the last three-year period, 1928, 1929 and 1930, only 50 percent had symptoms over two years, 36.6 percent acute retention, and 34 percent N. P. N. over 40. Here is evidence that the public is being educated to come in earlier for this operation before severe renal damage has been done.

In going over the causes of death in various clinics, the cardiovascular changes rank high. In prostatics, Northcutt and Graves found cardiovascular changes in 80 percent of the cases, Seng in 50 percent, and Willius at Mayos' in 42 percent. Undoubtedly these cases had had symptoms for years before presenting themselves for operation.

I believe by a continuance of the tendency to get patients in earlier for prostatectomy they will begin to present themselves to us with better circulation, as they are already presenting themselves in increasingly better renal conditions, and, as a result, the mortality in prostatectomy will be reduced to a minimum.

It is a fact that about twenty percent of enlarged prostates prove to be malignant. Carcinoma of the prostate is slow growing, metastasizes late, and if removed before it breaks through the capsule a good result is obtained. In 250 cases of carcinoma of the prostate reported by Young nineteen cases were entirely unsuspected before operation. The way to cure malignant disease is to suspect its malignancy, operate and have the agreeable report that you have removed an early cancer. Early prostatectomy will save many from dying a carcinoma death.

In order to ascertain whether prostatectomy is a success from a functional standpoint, I have collected statistics of the end result of this operation on 362 cases. These statistics were published by Swan, Crockett and Washburn, Briggs, Hale, Young and myself. The accompanying chart was constructed from these data.

This chart gives the functional results of six different urologists. Taking an average, it shows the operation restored 90 percent to normal urinary function. In regard to nocturia, 32 percent had none, 24 percent once, 32 percent twice, and 12 percent three times or more. Seventy-three percent voided four or five times a day with 93% stating that they had no trouble in starting the stream. Ninety percent had a bladder capacity of eight ounces. Eighty-three percent voided clear urine. Eighty-one percent had good health. Thirty-five percent had some cardiovascular condition. Ninety-six percent were satisfied with the results of the operation and would advise a friend who had the same condition to have such an operation performed.

This answers the question whether the operation is a success from a functional standpoint. Other

	Nay (35 Cases)	Swan (100 Cases)	Washburn-Crockett (100 Cases)	Briggs (50 Cases)	Hale (22 Cases)	Young (55 Cases)	Average (362 Total Cases)
Did the operation restore your urinary function to normal?	90%	82%	93%	90%	100%	90%	90%
Average number of times up at night to void?	35% 0 28% 1 14% 2 17% 3-4	18% 0 24% 1 41% 2 17% 3-5	36% 0 19% 1 15% 2 11% 3-4 8% 5		40% 0 60% 2		32% 0 24% 1 32% 2 12% 3
Average number of times to void during the day?	79% normal	86% normal		92% normal	63% normal	55% normal	75% normal
Do you have difficulty in starting the stream?	93% no		91% no	96% no			93% no
Largest amount voided at a time?	19% 16 oz. 71% 8 oz. 10% 8-4 oz.	30% 16 oz. 3% 12 oz. 66% 8 oz.					90% normal (8 oz.)
Any dribbling between urinations?	90% no	86% no	94% no		95% no	95% no	91% no
Is the urine clear?	83% yes		80% yes	96% yes	86% yes		83% yes
How is your general health?	68% good 32% fair	72% good	93% good	90% good			81% good
Are you satisfied with the results and comfort you have obtained from your operation?	97% yes		95% yes				96% yes
Would you advise a friend who is suffering from the same condition you had to have an operation?	97% yes		95% yes				96% yes
Have you had any heart trouble?	30% cardio-vascular			40% cardio-vascular			35% cardio-vascular

things being equal, the earlier the prostatectomy the better the results.

What are the early symptoms of prostatic obstruction? The first symptom usually complained of is nocturia, while the next symptom is voiding frequently in the day time. The patient has no urgency, as a rule, at this time but develops it later. Pain and hematuria may be early symptoms but not so common as frequency. There may be no symptoms referable to the urinary tract and a distended bladder may be found incidentally in the general examination of a patient for other diseases. At the present time complete retention brings in the majority of the patients for examination.

The solution of the problem of early prostatectomy rests with the family physician and the laity. Every man above fifty years of age who has frequency and nocturia should report to his family physician, who in turn should palpate the prostate by rectum and, after allowing the patient to void, catheterize him to see if he has any urine left in his bladder. If there is as much as one ounce residual after repeated examinations and the prostate is even slightly enlarged, the urological surgeon should be consulted. It may be necessary for the urologist to do a cystoscopy to rule out stone, median bar, atony of bladder, stricture of urethra, etc. In other words, the cause of the symptoms must be determined definitely. If an adenoma of the prostate is causing the obstruction, an operation should be done at once before the patient has acute retention. The patient is thus enabled to prepare for his operation without due haste in the arrangement of his affairs, the surgical hazard is practically nil, and he can be assured not only of a good recovery from the operation but of the complete disappearance of the distressing and annoying symptoms from which he has suffered and of the added suffering, sorrow, and general health impairment certain to develop when action is delayed.

Conclusions:

There are no valid arguments against early prostatectomy.

Senility increases the mortality rate of prostatectomy.

Early prostatectomy will save many from dying a carcinoma death.

Persistent residual urine as a result of an adenoma of the prostate is a positive indication for prostatectomy.

Retention with renal and circulatory changes indicate neglect by either the attending physician or the patient.

Education of the public as to the importance of nocturia and frequency will reduce the mortality and the morbidity.

Prostatectomy should not be an emergency operation.

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DISCUSSION

J. E. HIATT, M.D. (Richmond): In the management of these cases it certainly is not a question simply of finding a little retention and taking out the prostate. Prostatectomy is a more serious operation, even under the best conditions, than a simple appendectomy or something of that kind. However, when we take into consideration that what seems to be a simple obstruction or retention may be an adenoma, there cannot be much said against it and much said in its favor, if you are sure of your diagnosis. If we have adenoma there is not much doubt but that it will continue to grow worse as time goes on, instead of improving. You have all had cases of prostatitis in which there is infection and retention, sometimes complete, and it is very easily removed with proper treatment. Perhaps the patient will go on for years and years without any trouble whatever. It is very necessary to make the proper diagnosis.

I might not have the same feeling about cancerous condition of the prostate that the urologists

have, for they have had more experience than I have, but I think it is impossible to say definitely whether a prostate is cancerous or not, especially in the earlier stages. I believe if you let a prostate go to where you know there is infection of that type, that surgical procedure should not be instituted. I firmly believe that it will do more harm than good. I believe the patients will get along better with careful attention to treatment of some sort, or drainage, and probably live longer than if they submit to surgical operation.

I believe, as you all do of course, that the prostate is a sexual organ, and I think the essayist has mentioned the improvement in cases that are potent before. I think that is usually the rule. Probably we used to think differently, but in late years I think there is likely to be improvement in these cases. But that does not say there is not some pathological process there. But there cannot be any reason for damage, especially if we know we are removing an adenoma. There is probably prostatic tissue left that will function, but the only danger is that the modern operator is prone to damage some other tissues or organs. It is not an operation that is simple. It is done under conditions where you usually use the sense of touch more than vision.

Taking it all in all, I feel like complimenting Dr. Nay's paper highly. I feel in my own experience that it is hard to combat the public. It seems as though up to the present time the physicians do not carry much weight with the general public —not as much as the ordinary layman. I have wondered about that, and I do not know as there is any solution. We see the irregular practitioners doing a very large business—people like to be humbugged. But I do believe if the time would ever come when the people would have respect for the medical profession and their advice, and do as they say, that there would not be so much of this delay. I cannot think it is the fault of the general practitioner that there is delay. The general practitioner of today is educated to the point that a prostatectomy in careful hands does not show the mortality and morbidity that it used to show. It is true it is not perfect, because it is a study of the individual case, and some cases have been damaged beyond repair even though the general practitioner has not seen the case. We also know that some men are younger at seventy than others are at sixty, so we have to take into consideration all these things in determining what to do. But usually there is no reason why, if there is no obstruction other than adenoma, no cancerous condition, that the earliest time you can prepare the patient for operation is the best time to operate.

THE PRESENT STATUS OF RADIUM IN THE TREATMENT OF UTERINE HEMORRHAGE

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There is probably no gynecologic condition that is brought more frequently to the physician's attention than uterine hemorrhage. As it is symptomatic of a variety of ailments and some of these are of the utmost gravity, its diagnostic significance becomes a matter of enormous importance and one to which mature deliberation should be brought.

When hemorrhage of the uterus occurs in the child-bearing period of a woman's life, one has, first of all, to decide whether or not it is caused by one of the complications of pregnancy. If pregnancy cannot be excluded safely, the case does not lie within the scope of this paper.

As an initial step toward ascertaining the underlying condition responsible for the hemorrhage, a history of recent or earlier regular or irregular menstrual periods is indispensable; also a history of any hemorrhages that may have occurred at any other time. A general physical examination will also be required, since the cause of uterine hemorrhage does not always lie within the genital sphere. There is the possibility that the hemorrhage in a given case may be due to cardiac disease, chronic nephritis, disease of the blood, disturbance of the nervous system or disorder of an endocrine organ other than the ovary, and this must be borne in mind. Acute fevers may also be responsible for the hemorrhage. The most important intrapelvic causes of uterine hemorrhage are tumors of the uterus and deranged ovarian function, but there are a number of other pathologic conditions of the pelvic organs that may give rise to uterine bleedings: such are adnexal cancers (extremely rare in the tubes; much more common in the ovaries), salpingitis, chronic inversion, and erosion and ulceration of the cervix.

Wherever it is possible to effect cessation of the hemorrhage by directly treating the underlying condition, such a procedure should be instituted without delay. Where the underlying cause is constitutional, the loss of blood is occasionally so great a handicap to the success of treatment that it may be advisable to check the bleeding at once by irradiation, especially in middle-aged women.

By far the greater number of uterine hemorrhages are caused by cancer or fibromyoma of the uterus, or are of the type termed functional, occurring at the onset or termination of the menarche, or fall into that class of vague etiology which we have been used to ascribe to metritis or endometritis. With certain exceptions, radium is the method of choice in treating these types of uterine hemorrhage. It must, however, be understood that radium, x-ray and surgery are not antagonistic forms of therapy. Except in borderline cases, they are no longer competitive. The

particular type of case for which each is applicable has been worked out. The problem of therapy is a problem of accurate diagnosis—particularly of gynecologic diagnosis. The decision as to the correct treatment of a given case should not be made single-handed—not by the surgeon, nor by the gynecologist nor by the radiologist alone, but most of all should it be made on the advice of one with extensive experience in gynecologic diagnosis. If there is question of malignancy, the advice of a pathologist competent in the histologic diagnosis of tumors must also be utilized, since different types of cancer and different stages in the development of the cancer cell show varying susceptibility to irradiation and require different dosage. Furthermore, the fact must not be overlooked that a combination of two or all of these methods may be advisable and may frequently prove to be the ideal solution to a serious problem.

Radium was successfully employed in the arrestation of uterine hemorrhage in the very early stages of our inquiries into its therapeutic powers, but radium therapy is still not applied as frequently for this condition as results would justify. One reason for this unsatisfactory state of affairs is that the literature on this subject is largely confined to special journals and does not reach the practitioner who should be most concerned and to whom the patient has come for relief. A further reason why radium therapy is not more generally used is that habit plays so important a role in directing our actions and tends to make us walk along old paths even when we realize the superior advantages of roads more recently opened up.

Radium Therapy in Cancer of the Uterus. That radium will destroy many if not all forms of malignant cells has been proved definitely. The problem is to bring a lethal dose to all the cells generated by the tumor.

With the exception of cancer of the skin, there is no field of cancer therapy in which radium has proved of as much value as in cancer of the uterine cervix. Radium is today established in this country as the most valuable single agent in the treatment of this condition and further supporting evidence is held to be superfluous. As Block[1] states, very few of the large clinics in this country now perform operations for cervical cancer. The fact that radical hysterectomy maintains its popularity in Europe is probably due to the concentration of radium in a few institutions. The statistics of European clinics in which radium is used extensively compare favorably with those of the clinics which still adhere to surgery. Heyman[2] recently has compared the results of surgical treatment in 6,806 cases collected from the world literature with the results of radiologic treatment in 790 cases at the radiologic center, "Radiumhemmet," Stockholm. The percentage of cures, *i. e.*, "the number of cured cases five years after treatment, expressed as a percentage of all cases presenting themselves," was 19.1 for surgery, 20.6 for irradiation. The significance of these figures is enhanced when we consider the difference in the character of the material: in the surgical series 54.6 percent of the cases were operable, in the radiologic series only 25.6 percent were operable. The cure rates for the operable cases, taken separately, show an even greater advantage on the side of irradiation: 35.6 for surgery, 40.4 for radiology, and results published by other authors point in the same direction; but, for a number of reasons pointed out by Heyman, among which is difference of opinion as to what constitutes operability, such a comparison is less reliable than that between cure rates. Feldweg[3], in a comprehensive statistical study comprising many large European clinics, finds the cure rate for irradiation slightly better than for surgery, but he finds the rates for operation combined with irradiation the most favorable of all.

In a second report of a committee of the American College of Surgeons, presented by Greenough[4] and based on 822 cases from 22 hospitals, hysterectomy alone gave successful results in 1 case in 5; hysterectomy with radium either before or after operation gave better than 1 in 4; but the operative mortality in the cases with hysterectomy was 18 percent. Radium, with or without the cautery, gave successful results in about 1 case in 6, but without operative mortality. The best results, 1 successful case out of 3, were seen in the cases treated by radium and the cautery. The cases treated by hysterectomy were early favorable and borderline cases. The statistics of five-year cures published up to the present time do not include cases treated by present-day radium technic. When these cases begin to be included in significant numbers, it is generally expected that the figures will be found to have improved.

The main advantages of radium over operation in treating cancer of the cervix are the difference in primary mortality, and the possibility of ameliorating and, in an appreciable percentage, of curing inoperable cases. Further advantages are the elimination of the pain and long convalescence following operation and the fact that even in unsuccessful cases life is usually prolonged and rendered more comfortable. Hemorrhage and discharge are checked in nearly all cases.

The operative mortality of hysterectomy for cancer of the cervix is high—18 percent in Greenough's[4] report, 15 percent in Heyman's[2] series. Heyman gives the primary mortality with radium as from 1 to 2 percent. There was no primary mortality in Greenough's radium series. Dannreuther[5] warns that one cannot be too careful in excluding purulent accumulations in the pelvis before applying radium; he and a colleague each lost one patient from acute peritonitis due to failure to recognize a latent salpingitis, which the irradiation lighted up. An occasional sequel of radium application to the cervix is the formation of a collection of pus in the uterine cavity due to stenosis of the cervical canal and infection of the

retained secretions. The prognosis of postirradiation pyometra is not unfavorable provided the condition is recognized and relieved in time. The dangers are that it be mistaken for recurrence of the cervical cancer and the uterus in consequence be exposed to renewed radium treatment, which would result seriously, or that the period of expectancy be prolonged to the point of rupture of the uterus.

Perhaps the most striking advantage of irradiation is the possibility which it affords of obtaining cures (measured by the five-year standard) in inoperable, otherwise hopeless cases. Ten percent or more of such cases are curable by radium. Schmidt[6] presents a comparative study of the value of radium and x-ray, and the two in combination: 77 women with inoperable cervical cancer were treated by radium alone, with 10.4 percent five-year survivals; 72 similar cases were treated by radium and x-rays combined, with 8.3 percent success; 14 were treated by x-rays alone, with no cures.

At the present time the place of the x-ray in the treatment of cervical cancer is mainly to supplement radium or surgical treatment.

It should be emphasized that radium therapy is not for the inexperienced any more than is the radical operation. Zweifel[7], of Munich, remarks that proficiency in radiation therapy is more difficult to achieve than proficiency in surgery. The situation is summed up by Clark and Norris[8], who state that for the capable surgeon whose experience with radium is limited or to whom an adequate supply of radium is not available, hysterectomy is the method of choice, but that, given experience and a sufficient amount of radium, radium or radium with x-ray is decidedly the most satisfactory method for early as well as for late cases.

The importance of an early diagnosis is as strongly stressed by the radiologist as by the surgeon. It has been well stated that a late diagnosis of cancer of the cervix is made easily and is of little value to the patient, whereas an early diagnosis is often difficult to make and is of the utmost importance to the patient. Hemorrhage and discharge are the only symptoms of value for the early diagnosis. The hemorrhage is of the "spotting" type, irregular, generally small in amount in the early stages, but progressive; it is bright red in color. The hemorrhages usually have been occurring for some time before the discharge is sufficient to attract much attention. Clark and Norris[8] regard the relative diagnostic value of these symptoms as ninety points in favor of hemorrhage against ten points in favor of discharge. A massive hemorrhage due to erosion of a blood vessel is occasionally the first symptom. In the average case cancer of the cervix does not appear to influence menstruation. The advance of this disease is so insidious that it is important to take warning at the first sign. Every case of bleeding from the uterus after the menopause does not mean cancer, but every such case suggests cancer sufficiently strong to demand immediate and thorough examination. No case of abnormal "flow" in a woman at or approaching the menopause should be passed over lightly as "menopausal" in origin without ascertaining whether or not it is evidence of cancer.

It is the generally accepted view that cancer of the body of the uterus is best treated by hysterectomy if it is operable; otherwise, by irradiation. Such is the view expressed by Clark and Norris[8], by Cade[9], and by Heyman[2], among others. But certain American surgeons and certain European clinics are coming to use radium in operable cases and are claiming satisfactory results. The number of cases upon which opinion must be based are smaller than those for cervical cancer and hence do not admit of so much confidence in interpretation. Keith[10] and Schreiner[11] from experiences with series of from thirty to forty patients each favor radium treatment in all but good operative risks. In borderline cases Heyman[2] advises individualization, having regard particularly to the possibility of bringing the radium container into uniformly close contact with the uterine wall. This may be rendered impossible by distortion of the slope of the cavity by the growth.

The bleeding in cancer of the body of the uterus is of the same character as that in cancer of the cervix. Because of the concealed situation, diagnosis is more difficult and may be impossible without curettage.

Treatment of Uterine Hemorrhage Due to Cancer of the Ovary. In women with postmenopausal hemorrhage and discharge, in whom curettage of the uterus fails to reveal evidence of malignancy, one may suspect adnexal cancer. Although cancer of the ovary is much less common than cancer of the uterus, it occurs sufficiently often, as Anspach[12] states, to make it a menace. If the discharge presents a periodic character, the cause for suspicion is increased. It is advisable to be cautious about the use of radium for the purpose of stopping hemorrhage from the uterus when the reason for the bleeding is not clear; otherwise disorders of the adnexa will sometimes be overlooked. Surgery is the method of choice in cancer of the ovary, unless the risk is too great, in which case irradiation is in place. Heyman[2] approves of radium treatment from the uterus to follow surgical removal of the tumor.

Treatment of Uterine Hemorrhage from Endometriosis of the Ovary. This condition, arising from misplaced, endometrium-like glands, has received much attention of recent years and may be the cause of abnormal menstruation (especially menorrhagia) in women between the age of twenty-five and the menopause. Other symptoms are sterility, premenstrual dysmenorrhea, intermenstrual discomfort in the lower abdomen, dyspareunia, sacral backache and pain in the rectum or bladder bearing a distinct relationship to menstruation. Keene and Kimbrough[13] have analyzed one hundred cases and believe that surgery is the pro-

cedure of choice and that irradiation should be resorted to only in rare instances.

Radium Therapy in Fibromyoma of the Uterus. Cohen[14] reports hemorrhage from the uterus in the form of menorrhagia, metrorrhagia, or both, in slightly more than fifty percent of 860 cases of fibroid tumor of the uterus seen at the Charity Hospital, New Orleans. Bleeding was present in all but three of Cleland's[15] series of 102 cases. Clark and Norris[8] found it the most prominent or the only symptom in forty percent of cases. The hemorrhage nearly always begins as a menorrhagia, which increases in duration until in some cases the bleeding is almost constant; in other cases the flow becomes irregular. There is, however, a definite tendency toward periodicity, in contradistinction to the hemorrhage in cancer of the uterus.

The amount of hemorrhage is far from being in relation to the size of the fibroid. Siredey[16] points out that a large uterus, with subperitoneal nodules only, may have no influence on the rhythm or abundance of the menstrual flow. Other fibroids give rise to formidable hemorrhages though the uteri scarcely surpass the normal size. The uterus may be moderate in size and without bosses or deformation, presenting hard walls, more sclerotic than myomatous, and yet expose the bearer to severe hemorrhages. In the opinion of Clark and Norris[8], it is the tumors that cause pressure upon the endometrium that are most prone to be productive of hemorrhage. Cohen[14] did not find that involvement of the adnexa had any important influence on the tendency to hemorrhage.

Hemorrhage caused by a fibromyoma can be stopped by the use of radium in practically all cases; in large tumors with nearly as great certainty as in small tumors. Furthermore, the action of the radium causes the tumor to shrink and in some cases to disappear, at least to clinical observation; but shrinkage is a slow process, involving months or even years. (There is a difference of opinion as to whether the shrinkage is caused by the direct action of the radium on the tumor or results secondarily from cessation of ovarian function.)

There are definite contra-indications to the use of radium for the treatment of fibromyoma of the uterus. The most important contra-indication is uncertainty as to the correctness of the diagnosis. Operation by a competent surgeon is far safer than irradiation when the diagnosis remains uncertain.

The age of the patient is another important consideration. Cleland's[15] statistics show that the great majority of women applying for relief from symptoms of fibromyoma are between forty and fifty years of age, but an important number, twenty-one percent, in his series were between thirty and forty. There are two objections to radium treatment in the case of young women. One is that, while with careful dosage and screening it is possible in many cases to produce merely a temporary cessation of ovarian function, there remains a certain degree of risk that the amenorrhea will prove lasting and a premature menopause, with, of course, permanent sterility, will be brought on. The second objection is that as yet we are not absolutely certain as to whether or not children conceived subsequently to an irradiation, *i. e.*, developed from ova from previously irradiated ovaries, run a special danger of abnormality. Thus, while youth is not an absolute contra-indication to radium therapy of the uterus or ovaries, it is a relative contra-indication of great force, and this treatment should never be resorted to in young women without a very careful weighing of its risks and the exercise of the most painstaking judgment in dosage. To avoid hysterectomy or to save the patient from months or years of invalidism from anemia, one may be justified in producing amenorrhea in young women by irradiation, in the hope and expectation that normal ovarian function will return in the course of a year or two.

Large, degenerating or calcified tumors and those that by rapid increase in size suggest malignant change call for surgery. Radium is a dangerous agent in the presence of pelvic infection; hence pelvic pain is a warning not to use radium. Anemia too great to be explained by the amount of bleeding suggests degenerative changes within the growth which would make radium an unwise procedure. Profound anemia with a moderate sized tumor increases the risk of infection or necrosis and therefore contra-indicates irradiation. As C. Jeff Miller[17] points out, infected fibroids can be serious matters. If pressure symptoms are prominent, surgery is the more suitable method, since radium relieves such symptoms slowly. Submucous, pedunculated or subperitoneal tumors should not be treated by radium.

The type of fibromyoma for which radium therapy is the method of choice are the small and moderated-sized tumors without complications and not submucous. In these tumors the results are so satisfactory that in view of the safety to life (except in extremely rare accidents, there is no mortality), the shortened convalescence and the greater comfort to the patient, it appears self-evident that all suitable cases should have this treatment. Wood[18], however, feels that in the general hospitals of this country a large number of patients with fibromyoma are still being operated on who could be given just as good results by the simpler and less dangerous method. The death rate for hysterectomy for uterine fibromyoma is from two to three percent.

Radium stops hemorrhage more rapidly than does the x-ray and reduces the size of the tumor more regularly. In over ninety percent of cases one radium treatment suffices. A further advantage of radium over x-ray treatment is the convenience with which hysteroscopy and curettage if necessary may be done at the time of inserting the radium. This preliminary diagnostic procedure should never be omitted, as it is imperative that

we should be certain of what is in the uterus before we expose the organ to the action of radium.

Radium in the Treatment of Uterine Hemorrhage Due to Dysfunction of the Ovaries. The treatment of uterine hemorrhage where no gross lesion (such as tumor) is present to account for it is frequently a source of annoyance to the surgeon. Following the use of various intra-uterine applications and other remedies, a curettage is usually advised. The disturbance is at times overcome by this means, but frequently it is merely held in abeyance for a while and the patient returns with the same complaint. Following repeated failure, the surgeon, in desperation, will often resort to a hysterectomy—one of the most mutilating of operations! In many instances, however, it is our experience that this procedure might have been avoided through the use of radium.

Light has been thrown on the etiology of such hemorrhages by recent researches on the ovarian cycle and on the changes in the ovary and in the uterus that characterize its different phases. Evidence has accumulated that derangement of ovarian function is the cause of the hemorrhages of puberty and of the menopause, known as essential, idiopathic or functional, and also of the great majority of those heretofore ascribed—somewhat vaguely—to local disease of the myometrium or endometrium.

For almost forty years endometritis was considered the cause of most abnormal genital bleedings, unexplained by tumor, and this diagnosis led gynecology to a false path, besides being responsible for a local therapy that was too often disastrous. The anatomical changes in the lining of the uterus, on which the diagnosis of endometritis was made, are now seen to represent not primary disease of these tissues but an abnormal course of an essentially normal process.

Under the control of the ovary, the endometrium should proliferate, become necrotic and separate in regular sequence. The governing of this process is by means of two antagonistically acting hormones, the follicle hormone and the corpus luteum hormone. Each of these hormones should hold sway for a certain length of time and then yield in influence to the other. When anything occurs to upset this regular alternation of control, the changes in the uterine mucosa and the resultant menstrual bleedings become disordered. When the follicle becomes cystic and persists in the ovary, the follicle hormone continues to predominate, the proliferation of the endometrium which it induces goes on, the normal process of necrosis and separation of the mucosa, instead of taking place cleanly and over the entire surface at once, takes place in patches and gradually, and the uterine contractions have difficulty in stopping the bleeding from the necrotic areas because they are hindered by the presence of the thick, spongy mucosa. This explains why curettage often has an immediate curative effect on the hemorrhages, which, however, does not last, because the underlying cause, the dysfunction of the ovary, remains as before, and continues to reproduce the endometrial condition responsible for the bleeding.

Every irregularity in the ovarian cycle is followed of necessity by a corresponding irregularity in the menstrual bleeding. The corpus luteum hormone inhibits menstruation, the follicle induces it. Whatever hastens the maturation of the follicle shortens the interval between menstrual periods. What ever slows down the maturation prolongs the interval. Metrorrhagia is associated with complete absence or marked defectiveness of the corpus luteum; the bleeding is the result of localized patches of necrosis in a dysplastic endometrium. The endometrial dysplasia is the result of abnormal continuation of the unantagonized follicle hormone. In periodic dysfunctional bleeding, on the other hand, both the follicle and the corpus luteum hormones are present, but in a state of physiologic imbalance (Graves[19]). Adler[20] urges the prime importance of *biologic thinking* in elucidating the problems of abnormal uterine bleedings; and Young[21] observes: "Except in rare instances the terms chronic endometritis, chronic metritis and fibrosis uteri, as ordinarily employed, spring from a misreading of the essential pathology." The researches of Shaw[22] are of particular value in this question. He studied 200 consecutive cases of irregular uterine bleeding in which new growths, cervical erosions, etc., could be excluded, and found that in only a few instances can uterine hemorrhage be attributed to infections of the endometrium and in such cases there is a clinical history suggesting an inflammatory lesion in the endometrium; the majority of cases of irregular uterine bleeding have no relation whatever to infection of the endometrium. Acute endometritis, which is oftenest met with after abortion or delivery at term, tends toward spontaneous healing and chronic metritis is a relatively rare disease. No case should be labeled endometritis unless there is definite evidence of infection of the endometrium.

These researches and others, including those on the relation of the pituitary to the ovarian cycle (Young[21]), give us cause for hope that we are progressing toward a rational pathology from which shall spring a truly causal therapeusis directed toward the factors that disturb ovarian function. Until that time we must rely on symptomatic treatment of the hemorrhage and it is here that radium is proving a most valuable measure. It is, as Burnam[23] has well stated, an opprobrium upon surgery to feel compelled to advise hysterectomy simply because curettage and local and general treatments have failed. For all bleedings near the menopause and where one does not need to consider the preservation of the reproductive function (provided, of course, malignant tumor has been ruled out and no other definite cause for the hemorrhage is found) radium offers the ideal alternative. In the case of young women, the matter, as has been stated, is not so simple and one must proceed carefully, but experience has

shown that it is possible at times to reduce the menstrual bleedings without stopping them altogether, and at other times to induce a temporary amenorrhea, after which normal menstruation returns. The quiescent ripening follicles are injured more easily by radium than are the primordial follicles and can be destroyed by a dose that does not destroy and as far as we know does not injure the latter.

Conclusions:

1. Radium is not yet as widely used in the treatment of uterine hemorrhage as results would justify. This is partly because the publication of results obtained with it is largely confined to special journals, but partly also because habit influences mankind to continue in familiar paths.

2. Radium is today indisputably the method of choice in treating cancer of the cervix.

3. Radium is definitely the method of choice in treating certain types of fibromyoma of the uterus, especially in cases in which the chief symptom is hemorrhage. This applies more particularly to cases in women over forty. In younger women each case must be individualized carefully. In suitable cases radium is practically always successful.

4. Radium is the ideal treatment for uterine hemorrhages without gross pathology at or near the menopause. Similar hemorrhages in adolescent girls and in women under forty present a more difficult problem, but by careful grading of the dosage it is possible to induce amenorrhea which lasts for a few months to a few years, after which menstruation and the possibility of conception return. Recent research indicates that the cause of the great majority of hemorrhages from the uterus without gross pathology is dysfunction of the ovary and not local disease of the uterine wall or lining. There is hope that further research on the etiology of ovarian dysfunction will lead to a truly causal therapy of such hemorrhages from the uterus, but at present our main reliance in checking the bleeding is on radium.

5. In all cases an exact gynecologic diagnosis is essential before radium is inserted into the uterine cavity. An aid in the diagnosis is the hysteroscope which the writer has devised.

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ORGANIZED MEDICINE AND PUBLIC HEALTH AGENCIES*

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Public health agencies are relatively recent developments. They are due to a health-mindedness among all classes of the population. They are the result of the great publicity given every advance in the science of medicine. Public health agencies fall into two general classes: (1) official health agencies, (2) health agencies conducted by laymen.

The relation of the practicing physician toward public health activities in his community has not always been as it should be. Organized medicine at times has reflected this same attitude.

I believe that the time has arrived when we should make an effort for more complete cooperation. We should try to remove any element of suspicion and distrust which, rightly or wrongly, has developed. We must create an atmosphere of mutual confidence and trust wherein proper limits of activity are acknowledged and maintained.

Until a relatively few years ago the medical profession was the only agency actively engaged in health work. Their endeavors pertained solely to the individual sick. Only a very few had the vision to look beyond the immediate effort to cure the sick toward the greater wisdom of keeping the many well. This period represented a time in our community life when a scattered population and small towns and villages presented much simpler social problems. Times and conditions have changed in the past thirty years; great scientific discoveries, together with a better understanding of the early evidences of disease, all combining in the development of preventive medicine, have produced a marked metamorphosis in the practice of every doctor. Many of us have been slow in recognizing this new situation in its relation to a greater population. Too many of us still are thinking in terms of the individual sick, especially those individual sick who are able to employ a doctor. We must learn to orient ourselves in terms of community health problems, which by their very nature

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must be dealt with either through the machinery of government, or through the unofficial organizations we find in almost all communities. These problems are: (1) The care of the indigent sick, (2) the education of all citizens in those phases of right living which come within the purview of public health agencies, (3) the prevention of communicable disease.

The indigent is truly a community responsibility, whether sick, in need of food, of clothing, or of shelter. The indigent sick should not in any sense be a charge against the physician. In the days of simpler social conditions, the care of the poor was not a big problem, and the local doctor took them as his own private charity. It was not a hardship then. A little later, as the numbers of the poor increased, the township or the municipality employed a doctor whom the poor must consult. This job often was given to the doctor who would agree to do it for the least money, or it was obtained through political favoritism. The poor were and are by this practice denied the priceless privilege of selecting their own doctor. Perhaps this does not seem important in relation to the poor, but as doctors we must remember that the prerogative of selecting one's physician is a basic concept of ethical medical practice to which organized medicine is committed. If it is right at all, it is a wrong action to deny this favor to anyone; consequently, it becomes all the more reprehensible to force it onto those who are helpless through their poverty.

In Iowa, a system has developed which offers a solution in keeping with medical practice. The county society enters into a contract with the trustee, or the county commissioners, wherein the indigent may choose his own doctor, who is paid by the township or county the regular fees charged currently for such service. The principle is the same where the grocer or the coal dealer is paid by poor relief. They are expected to charge current prices. Just why the doctor is asked to give his services for little or nothing in such instances is largely the fault of the doctors themselves; we have educated the people to rely on us for this service. It is now our duty to teach them otherwise.

We must learn to think sympathetically in terms of those community health problems represented largely by the activities of lay public health agencies. This work is educational in nature and of tremendous benefit to the community, as well as to the profession. We doctors have been slow to grasp the full significance of the great advances in scientific research in relation to preventive medicine, hygienic living conditions, and food values, as related to community education. We are prompt to apply these new discoveries to those who have sought our advice, but I know of no official effort being made by organized medicine to pass this on to the community; the nearest approach is the weekly releases by our Bureau of Publicity of the State Association. While this is a move in the right direction, it fails to perform a full service; it may be doubted whether it reaches at all many of those who need it most.

It has been a logical development that organizations of laymen have stepped in to perform a function which we have neglected. In many ways it is fortunate that we have not undertaken directly to educate the general public. Laymen have gone ahead with great ability and popularized certain phases of it. They have succeeded in creating public sentiment in favor of all kinds of public health activity, as is shown by the ease with which money can be raised for almost any official or unofficial health program. Laymen have a distinct advantage in the general recognition of their disinterestedness while the medical profession might not have been so fortunate.

To obtain full value of the use of preventive measures, such as the Schick test, toxin antitoxin, vaccination, examination of school children, periodical examination of the apparently healthy, and the child welfare clinics, just to mention a few, we must have a public well informed concerning them. The public health agency is in a favorable position to give this information and to create in the public mind a desire for them. Is this not an important service to the community, as well as a benefit to the profession? The publicity which sometimes follows each advance in medical science often has been ill-advised, in that it creates an expectancy in the public mind not warranted by the facts. However, since the uninitiated lay mind eagerly grasps at the fanciful pictures and stories of Sunday editions and certain magazines, we need not be astounded at impatience with current medical practice when it seems to lag so far behind.

Official health agencies are represented by the State Board of Health and the county, township and municipal health boards, whose duty it is to administer the laws. These bodies are largely in the control of physicians whose official responsibility and professional training serve as an effectual curb to any radical tendencies. Some educational work is undertaken by the State Board of Health. This is an important feature, capable of great benefit to the people. The exhibits and lectures being official, they must remain within the realm of scientific fact, and the general result will be good. Yet it is subject to the weakness inherent in all propaganda. In stressing a few points, the undiscriminating audience is over-impressed with them, and the listeners often seem to feel that they have now the answers to all health problems. The auditors are in the position often described as being unable to see the woods on account of the trees. By this I mean that the subject in hand often is over-emphasized in the lay mind to the neglect of other important facts. Baby shows and other types of clinics have as their basic intent the education of the mother, or patient; we doctors can benefit only by any endeavor which may result in the better understanding of health rules by our patients. Criticism comes, if it comes at all, when those conducting the clinic in their enthusiasm step

beyond their educational mission. Treatment or suggested treatment, or any expression that tends to create distrust or dissatisfaction with the local profession in the minds of the laity, is not conducive to that sympathetic cooperation for which we are striving.

Public health agencies, when promoted by laymen, are not so apt to be governed by the professional tradition of right action; they are more likely to be guided by the business concept, and hence a good deal of irritation and misunderstanding arises. As a case in point we find prominent and wealthy business men sponsoring a public health institute in a neighboring city, extensively advertising in the lay press and defending their actions by claiming that the medical profession is wrong in its attitude toward newspaper publicity.

The enthusiastic laymen are the ones who have sold this idea of public health promotion to the rest of the community. Whether we like it or not, the lay public health movement is here to stay. It has developed to the point where it is accepted by the public and is given full credit for the great good it has accomplished through educational measures. That mistakes have occurred no one will deny. It is remarkable that so few have been made. It is to be regretted that there has not been more active support, and more hearty cooperation and direction, by organized medicine. This has been one of the great mistakes of organized medicine as I see it. We have spent too much effort complaining about these activities and conjuring up a vision of state medicine as a result, when a little constructive thinking and forceful action along the line of cooperation with local health efforts might solve many, if not all, the things which we now lament. If we are to merit the confidence of our neighbors in this respect, we must do more than oppose and object to those who are trying to do something to meet a very real situation; we must be able to offer something better, something constructive.

A great deal of educational effort must be made if we are to have the proper cooperation between physicians and public health organizations. First, we doctors must give less thought to criticism and hostility, which has been too much our attitude in the past. We must realize the tremendous benefit accruing to the community, as well as to the profession, from properly directed public health educational campaigns. I am convinced that the great majority of those connected with lay organizations would welcome our help. Much of the educational effort must be expended on the leaders, to bring them into line with that vast knowledge in handling health problems which are the everyday experience of the profession.

The practice of medicine may be thought of in terms of the individual physician and his sick patient. It may be considered as the sum of all the measures used by the physician to cure this patient. The basic principle of practice is this: The physician does not select his patient; the patient selects his physician. This custom of selection is recognized generally through the acknowledged right to change from one doctor to another without any regard to the physician's feelings in the matter.

The proper relationship of physician and patient resides entirely in the confidence of the patient in his physician. The attitude of the physician is paternalistic. He does not give his patient necessarily what he wants but that which is considered best for him. This, briefly, is the simple mechanism of the practice of medicine. If we alter this in any way, we produce profound changes. The employment of a physician by an industrial concern, by a fraternal order, by an insurance company, or by the state, or by its subdivisions with whom the sick must advise—all of these outrage that basic relation between physician and patient which has been the common practice down through the ages. The element of confidence as a directing force has been destroyed, nothing being added to compensate for the loss.

Organized medicine, which best reflects in the mass the instincts and experiences of the individual physician, must be jealous of the maintenance of this principle. It must view and judge all public health activities as they affect this relation. If we conduct our public health activities with an eye to preserving this relation, we will have no difficulty in obtaining the whole-hearted and sympathetic cooperation of the doctors in every community.

It is recognized generally that the nurses engaged in public health work should have special preparation, yet too often they are employed before they have had this advantage. Nurses are not trained as social workers in the hospitals. If they have this training, they receive it elsewhere. Many public health nurses find themselves in positions that would be served better by trained social workers. When the social worker finds sickness, it is easy for her to disclaim a knowledge of medicine and to advise the consulting of a physician. This is not so easy for the nurse; the public often thinks of her as almost a doctor. The criticism arising from this situation should be met by a more careful selection of trained personnel, as well as by a better understanding on the part of the employers of the legal limitations imposed upon nurses by the Medical Practice Act. It is wholly possible that, with responsible physicians joining in the councils and helping plan the work, this irregularity can be corrected.

In order to obtain more complete cooperation and more sympathetic understanding, I believe that there must be an ever-closer liaison between the Indiana State Medical Association and the Indiana State Board of Health. During the past few years efforts have been made, both by the Association and by the Board, in this direction. I hope they will continue. Only in this way can the best interests and the greatest usefulness of each to the public be conserved.

Toward public health agencies under lay control, our state and county societies should work out some method of cooperation looking toward the making available to them that vast experience in health matters which is the sole heritage of the profession. We owe a duty to the community in this regard. Ours is the responsibility that public health teaching be confined to the realm of scientific fact and be kept within the limits of sound practice.

CANCER OF THE SIGMOID*

(WITH REPORT OF A CASE)

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Cancer is one of the most serious problems with which the physician has to deal. Once cancer is diagnosed it continues a steady progress to a fatal termination unless operative intervention is instituted or some destructive method used. Many so-called curative therapeutic measures have been instituted during the past few years, but surgery and radium remain the principal treatments.

During the past few decades an intensive study into the etiological factors or cause has failed to uncover any new theory or put forward any advanced thought that would bring us nearer the solution of the cancer problem. The general impression prevails that cancer is becoming much more common when statistical reports show that one-sixth of the deaths occurring past the age of forty-five are caused by cancer.

To have any measure of success in the cure of cancer of the sigmoid and rectum emphasis should be placed on early diagnosis and constant watch for the initial symptoms. When any prolonged pelvic or sacral distress is manifest, or complaint is made of frequency, or where the daily cathartic must be increased, the proctoscope should be brought into use. The gloved forefinger will apprehend the majority of the rectosigmoid growths. Charles Mayo claims that most rectal cancers have some contact with the recto-sigmoidal junction, which can be reached with the examining finger. Beyond observation through the proctoscope the x-ray is the method of choice in making a diagnosis.

While there are no pathognomonic symptoms of colonic cancer, any marked change in the intestinal habits should call to our attention the necessity of a general examination. Whenever visible blood appears in the stool or on the stool repeatedly it becomes a culpable offense to neglect a searching investigation as to what might be the cause of the frequent appearance of blood and rule out the probability of a malignancy.

Miles, of London, in observing the gradual development of rectal cancer in four patients where the growth was diagnosed early, but refused treatment, found that the process was comparatively slow, taking about eighteen months until three-fourths of the circumference of the rectal wall was involved. This would give an approximation as to the duration of the disease. He further states that it takes from twelve to eighteen months for the growth to invade the fascia.

The invasion of neighboring structures only takes place following the penetration of the fascia, so it appears that involvement of adjacent structures requires at least twelve months after the first appearance of the disease. However, the spread of the disease through the venous and lymphatic channels occurs simultaneously, and with much greater rapidity, along the vessels as they course upward through the abdominal cavity. It is very essential to a successful operative treatment that an early diagnosis be made. Because of the few subjective symptoms during the early progress of the disease, the showing of blood at stool or any great departure from the regular daily bowel habits should have thorough investigation to eliminate the possibility of cancer. We should redouble our diagnostic acumen and lower the operability rate of fifty-eight percent which prevails at The Mayo Clinic.

With the instruments of precision which are given us and the ease with which the early diagnosis of cancer of the rectum can be made, we should be more searching in the early stages of this disease to find out the cause. Surround the patient who complains of irregularities of the bowel function and the showing of blood at stool with the same precaution as you do those with nodules in the breast or the post-climacteric showing, which have become guardian signs to the individual who has been taught to seek early advice. Because the rectum does not lend the ease of observation as do other organs will not mitigate the delay in arriving at a diagnosis and the relief of the patient.

Mr. A. C. S., a merchant, age sixty, white, married, was referred with a history of bleeding during bowel movement. He always had enjoyed good health and had never been seriously ill since childhood, until about five years ago when he had a diarrhea which lasted for one week. His mother died of cancer of the breast, father died at the age of seventy-eight, has four sisters and two brothers living. At the time he consulted me he complained of a bowel movement early each morning which he said consisted principally of gas, blood and mucous. This was followed within one-half to an hour by a natural formed passage which gave him a sensation of relief, and no further trouble was experienced during the day. Prior to this time the bowels always had been regular and he never had to take a cathartic. He complained of distress over the line of the transverse colon on a level with the navel, which was first noticed about eight weeks before consulting me, and it gradually grew worse. He complained of colicky pains at times preceding a

*Read before the Indianapolis Medical Society, October 13, 1931.

bowel movement, though this pain would sometimes be felt also during the day. He never experienced much rumbling or meteorism. The pain could be relieved by pressure over the abdomen. Did not complain of any stomach trouble, had a good appetite, did not complain of bloating, no vomiting, had never experienced any catarrhal trouble, and was not troubled at night with frequency of urination. Blood had been noticed for about six months before he consulted me. The average weight was 165 pounds, with a loss of fourteen pounds in the last month.

The general physical appearance was irrelevant except for an expression of tiredness. On palpation a movable tender mass was discovered in the left side of the abdomen in the region of the sigmoid. Proctoscopy failed to visualize the tumor, x-ray following a barium enema showed a filling defect just above the pelvic brim on the left side. This mass had been discovered two months before by his family physician, who advised consultation. The patient was reluctant, and postponed additional advice until the pain became quite severe and the increased loss of blood became very noticeable.

The method of peforming this operation was that of Mickulicz. A liberal section of the sigmoid containing the cancer was mobilized and the two limbs sutured together for the distance of about three inches. This spur was sutured in the abdominal wall, with the cancerous growth lying freely on the outside. After five days the tumor was cut away, leaving the two limbs of the sigmoid. On the tenth day following operation an enterotome was placed in the open ends of the gut and gradually closed until the tissue became necrosed. This permitted a free passage of feces through this channel into the distal end. The abdominal wound closed without suturing.

COMBINED SIMULTANEOUS ARSENOBENZENE BISMUTH THERAPY*

(A REPORT OF ONE HUNDRED TWO PATIENTS WITH EARLY AND LATE SYPHILIS)

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Combined simultaneous arsenobenzene bismuth therapy is a type of treatment which consists of a course of weekly injections of an arsenobenzene and a bismuth preparation given on the same day. It might be looked upon as two separate courses given concurrently.

This kind of treatment was introduced a few years ago by Dr. Schamberg in order to obtain the maximum therapeutic effect of these two remedies in the minimum amount of the patient's time.

The first or combined course of treatment, as administered in Dr. Schamberg's clinic, is preceded by a preliminary intramuscular injection of bismuth in those patients in whom the results of a therapeutic shock, or Herxheimer reaction, are to be avoided. All patients do not receive the preliminary injection of bismuth, as with some it is very important to render them non-contagious as rapidly as possible as a public health measure.

Three to four days after the preliminary bismuth injection the combined simultaneous therapy is started with weekly intravenous injections of neoarsphenamine, and on the same day an intramuscular injection of a bismuth preparation as potassium bismuth tartrate.

The dosage of neoarsphenamine varies from 0.2 to 0.6 grams, with the average patient of this clinic in most instances receiving 0.3 to 0.45 grams per injection. Small patients receive 0.3 grams, and the larger patients receive 0.45 grams as the average dose, except with one patient the dose is 0.6 grams. About one-half the usual amount of bismuth per injection is given, it being 0.1 gram each time. Twelve of the concurrent weekly injections constitutes the first course, although in some instances the number is extended. The reaction of both the patient and the disease to the treatment determines the occasional extension of the first course.

This report covers approximately thirty percent of the patients who have started on combined simultaneous therapy in this clinic during the past three years. Individuals who lapsed treatment with less than six visits are not considered, even though some had negative serological reactions with six or less treatments.

This is an attempt to show the effect of an efficient and safe type of therapy upon the serological reactions primarily, as the impossibility and impracticability of following up the clinic patient is too well known to allow a review of three years of therapy to pass as final results. It must be kept in mind that the serological reactions of a syphilitic patient may become reversed at any time. Also reversed serological reactions frequently relapse after lapsing early intensive therapy.

The Kolmer-Wassermann and Kahn tests, along with cerebro-spinal fluid examinations when available, are used in reporting the effects of this therapy. Clinical improvements were so uniformly good in all but a few patients with visceral and nerve syphilis that they are not recorded. Reinfection was not encountered. Pathological reports, while the most convincing, are not practical.

A routine of subsequent courses is not presented as such courses vary with the individual patient. The effects of such subsequent courses will be noted where such courses are effective and the combined simultaneous course fails to reverse the serological reactions.

While there was a time when able syphilologists thought that it was best to allow secondary manifestations to develop in order for the defensive mechanisms and reactions to be brought about.

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almost all syphilologists of the present age feel that therapeutic interference (consisting of intensive treatment) before secondary signs appear, is the best plan. The earlier the serological reactions become negative, the more favorable the prognosis. Serological reactions are used as a guide to types of therapy, and serological reactions are not to be considered the object of therapy.

Conservative syphilologists contend that syphilis, comparable with tuberculosis, is liable to recur in activity at any later date, and success is achieved by following and observing the syphilitic patient for the remainder of his life. Lapse of treatment often results in entrenchment of the disease, with the well-known serological relapses that remain fixed and uninfluenced by a return to active treatment.

Serological relapse is the result of irregularity, or of lapse of treatment, as was shown by Gilman and McIntyre[1].

It has been shown by Klauder[2] that small doses of the arsenobenzenes in rabbit syphilis tend to produce arsenic resistant syphilis. The dosage of arsenobenzene employed by Klauder was noneffective on the rabbit syphilis, whereas the dosage used with these patients was very effective both clinically and upon the serological reactions. Therefore, the small doses of drugs used cannot be claimed as a cause of drug fastness in simultaneous combined treatment. Klauder used "desensitization doses" with his rabbits. Desensitization doses of arsenobenzenes for humans are as low as one hundredth the amount used on these patients.

Toxicity. The question of using two toxic drugs at the same time must be considered. Greenbaum[3] has very ably discussed this point. Since two toxic drugs are being introduced at the same time, the dosage of each should be somewhat reduced. This is one of the reasons for employing smaller doses, when instituting combined simultaneous therapy. These two drugs are organo-tropic for different structures. The arsenicals are dominantly organotropic for hepatic tissue, and produce the greatest toxic effect through the liver, while the bismuth preparations are organotropic for renal structures. Thus, the toxic dose of each drug could be considered alone. However, as will be shown later, less than the orthodox dose of each drug is very effective, when the drugs are combined, as then the spirocheta pallida is being attacked by two of the most powerful spirocheticides probably in two different ways.

There were only two patients who developed arsenical dermatitis. These two reactions were very mild, neither developing beyond the erythematous weeping acute stage, and both were rapidly brought under control with sodium thiosulphate. One of the patients was able to go back on the arsenicals again for a later course after desensitization. There was not a patient of the whole series who developed a sign or symptom of arsenical hepatitis.

Bismuth gingivitis and stomatitis developed in a few instances, but was not severe enough in any patient to require the bismuth injections to be discontinued or diminished. All of these patients recovered almost immediately with proper dental hygiene. There was not a single patient showing renal irritation from the bismuth. The dose of bismuth employed, as previously stated, was one-half the maximum dose.

Historical. The idea of mixed, combined, or simultaneous therapy in the treatment of any disease is as old as the art of medicine. Nobody knows where in medical mythology the "shot-gun" prescription originated. All modern ideas of combined therapy are borrowed from previous methods of a similar nature. In the treatment of syphilis it seems that the first scientific application of combined therapy was the use of the iodides and mercury in the same prescription. This combination has stood the test of time.

Later when the arsenobenzenes were introduced, the idea of combined arsphenamine mercurial therapy was applied almost immediately. The Linser technic of giving arsphenamine and mercury at the same visit has been used widely by various clinics. Chargrin and Stone[4] in a paper on early syphilis have reported the use of the Linser technic on a series of patients with good results.

When Levaditi and Sazerac introduced bismuth and showed it to be such a valuable adjunct to the other specifics in the treatment of syphilis, it was only natural that combining this drug with the older effective ones would be a logical move. Indeed, this thought was so apparent that chemotherapeutists as Raiziss[5] sought to combine chemically two of the drugs. The result of this research is bismarsen, a bismuth-arsphenamine preparation which is a very effective anti-syphilitic remedy.

Necessity was the factor which caused neoarsphenamine and bismuth to be given at the same visit at this clinic. The patient could not afford the time necessary for two visits a week for alternate combined treatments, so Dr. Schamberg started to give both treatments at the same time.

Naturally the idea of combined simultaneous therapy would produce champions and opponents. Milian[6] favors alternate straight courses of one drug at a time, while Schamberg[7] and Harrison[8] strongly champion mixed or combined simultaneous therapy. The latter states that he thinks that bismuth along with the arsenobenzenes lessens the frequency of neuro-recurrences. Furthermore, he states that early, thorough, and intensive treatment with the proper remedies obtains the best and most lasting results. Harrison also advocates conservative dosage of neoarsphenamine when it is combined with conservative dosage of bismuth. Chargrin and Stone[4] report that with the various methods including the Linser technic, patients who do not respond to therapy early generally remain recalcitrant to further therapy, and serologically at least a relapse occurs. In a measure the same state of affairs was

found to be true with these patients, except that several serological reversals were brought about by persistent bismuth therapy alone. Schamberg[7] has for some time advocated conservative dosage of the arsenobenzenes. His ideal in the treatment of syphilis is maximum curative action of the drugs with maximum body security for the patient. In the treatment of syphilis, the remedies are a two-edged sword, and the patient and his welfare rather than the disease or serological reaction should be foremost in the mind of the conscientious physician.

Ravault has instituted combined therapy in his clinic, as reported by his coworkers, Richon and Bocage[9]. In the St. Louis Hospital they give the preliminary bismuth injection to avoid the Herxheimer reaction, then start on combined therapy and obtain for the most part better results than with straight single courses. Renald[10] has found that with combined simultaneous arsenobenzene bismuth therapy in early syphilis an average of six weeks of treatment is all that is required to obtain negative serological reactions. Dujardin[11] reports and favors the reinforcement of arsphenamine therapy with simultaneous injections of bismuth in the early or critical period. Stokes[12] says that bismuth is good with and may be given with arsphenamine, simultaneously. He states that bismuth is valuable in resistant infections and in late syphilis. Wright[13] reported fourteen cases of secondary syphilis in which an average of six combined simultaneous treatments produced negative serological reactions. Beintema[14] in applying the "Schamberg method"[7] in his clinic at the University of Groningue, reports no reactions or accidents after nine hundred ninety-six combined simultaneous injections in ninety-six patients.

The object of therapy in early syphilis is the eradication of the disease by the best-known safe method, intensive therapy. The object of therapy in late syphilis is the eradication of the disease if possible in selected patients, and the building up of the resistance of others for the purpose of arresting the disease. Experience has shown that it is a common mistake, and gross error to be directed entirely by the serological reactions.

The arsenobenzenes and bismuth are the two most effective anti-syphilitic remedies available at present. After a combined simultaneous course of these two drugs, the serological reactions rapidly become negative, with maximum safety to the patient in practically all early syphilis, and in a very creditable percentage of late syphilis. A search of the literature as well as the results in this clinic verifies this statement.

In reporting the effects of combined simultaneous therapy upon the serological reactions of these patients for classification purposes they are grouped according to the stage of the disease. The patients are also grouped according to their regularity or irregularity in clinic attendance. Regular patients attend the clinic once a week, and irregular patients may average one visit every two weeks or more.

Report of Cases

Primary Syphilis. There were two patients with sero-negative primary syphilis having positive darkfields. The serological reactions never became positive in either one at the end of a year of regular treatment for one and irregular treatment of a year and a half for the other.

There were eight patients with positive serological reactions in primary syphilis, who were regular in attendance. The serological reactions in all became negative with an average of eleven combined simultaneous treatments. Four of these patients required six combined treatments each to obtain the above result, and the other four required twelve or more combined treatments to reverse the serological reactions. All eight of these patients have been observed from three months to three years and in none has there been a serological relapse. Spinal fluid examinations were made on three of these patients seven months after therapy was instituted and all were normal.

There were six patients with positive serological reactions in primary syphilis who were irregular in attendance. Only three of these became sero-negative with an average of seven treatments. The remaining three of the irregular group failed to have their serological reactions reversed by the customary course of twelve combined simultaneous bismuth neoarsphenamine injections. The patients of the irregular sero-positive primary syphilis group showed a fifty percent response to therapy while the regular sero-positive primary syphilis group showed a one hundred percent response to therapy.

Secondary Syphilis. There were twelve patients with secondary syphilis and strongly positive serological reactions who were regular in attendance. Eight of these had their serological reactions reversed after from five to eleven combined simultaneous treatments, with an average of nine treatments. Of the remaining four regular patients who did not respond to the combined therapy, two had negative serological reactions after approximately twenty additional bismuth injections each, and two lapsed treatment after failure of the combined course. Spinal fluid examinations were made on six of the patients who responded to therapy an average of ten months after the onset of treatment and after the serological reactions had been reversed. All six of the spinal fluids examined were normal. The spinal fluid examinations made were of the routine type consisting of Wassermann and Kahn tests, cell count, globulin and colloidal reactions.

There were eleven patients with secondary syphilis who were irregular in attendance. Eight of these had their serological reactions reversed with from four to twelve combined simultaneous treatments with an average of eight treatments. Of the remaining three irregular patients one had his

serological reactions reversed after ten additional bismuth injections, and two lapsed treatment after the full combined course failed to produce negative serological reactions.

Latent Syphilis. There were twenty-two patients having positive serological reactions and latent syphilis who were regular in attendance. Thirteen patients had their serological reactions reversed after from four to fourteen combined simultaneous treatments, with an average of eight treatments. The serological reactions of one of these thirteen was not reversed by thirty bismuth injections previous to the institution of combined simultaneous therapy. Of the remaining nine regular patients, one developed arsenical dermatitis aften ten combined treatments and was placed on straight bismuth and after twenty such additional injections had the serological reactions reversed. The other eight patients failed to have their serological reactions reversed although all had the intensity of their serological reactions diminished. Spinal fluids were available from six of the patients after their Wassermann and Kahn reactions had been reversed an average of fifteen months after therapy had been instituted. All spinal fluid examinations were normal.

There were twenty-six patients having positive serological reactions and latent syphilis who were irregular in attendance. Seven patients had their serological reactions reversed after from eight to fifteen combined simultaneous treatments with an average of eleven treatments. Of the remaining nineteen patients, one had the serological reactions reversed after nine additional bismuth injections, and eighteen failed to show reversal of serological reactions although many had the intensity of the reactions diminished. One of these eighteen patients developed arsenical dermatitis after six combined treatments. This was the only patient of the entire report who received over 0.45 grams of neoarsphenamine, his weekly dose being 0.6 grams. There were reports upon four spinal fluid examinations made after the blood serological reactions had become negative. All four reports were normal. It is not the policy of this clinic to make spinal fluid examinations until the blood serological reactions have become negative except where there are clinical indications.

The remarkable fact to be found in the study of this irregular latent group is that negative serological reactions are found in as many as seven of these patients, considering not only the irregularity, but also the amount of time utilized by the patient in taking the combined simultaneous course. One patient took over a year to receive eighteen combined treatments and the serological reactions became negative after the first twelve treatments.

Tertiary Syphilis. There were ten patients with strongly positive serological reactions and tertiary syphilis who were regular in attendance. Only one had the serological reactions reversed after twelve combined simultaneous treatments. Of the remaining nine patients one had the serological reactions reversed after seven additional bismuth injections, and the rest failed to have their serological reactions reversed although most had the intensity of the reactions reduced. The one patient who responded to combined simultaneous therapy had a normal spinal fluid five months after institution of therapy.

There were five patients with strongly positive serological reactions and tertiary syphilis who were irregular in attendance. One, a tabetic, had his blood serological reactions reversed after eight combined simultaneous treatments. His spinal fluid showed a return of the colloidal curve to normal, normal cell count, negative globulin, negative Kahn with a one-plus Wassermann reaction in the first tube by the Kolmer method. The remaining four tertiary irregular patients failed to have their serological reactions reversed or diminished to any marked extent by combined therapy.

Of the one hundred two patients, there were four sero-relapses, all occurring in irregular patients, an average of five months after lapsing treatment. One patient had primary, one secondary, and two latent syphilis.

The Kahn reaction almost without exception was the first serological reaction to become positive in the patients of the sero-positive primary group. Likewise the Kahn reaction again was the last to become negative during treatment of the entire series of patients.

Summary. Quality of the arsenobenzene used is a most important factor in obtaining good results. Attention is called to the absence of serious reactions or complications from the drugs.

Besides quality of arsenical, dosage is extremely important in the prevention of reactions. The excess of large doses is lost almost immediately in excretion by the kidneys. Tolerance of arsenobenzenes as with other drugs is very often a question of dose or amount given. Individual variations in the threshold dose for toxicity are to be expected. Many patients who develop arsenical dermatitis or hepatitis do so not because of idiosyncracy to arsenic but because an inferior organic arsenical or an intolerant dose of arsenical has been given to them. The ideal of therapy is maximum curative effect with minimum toxic effect. This ideal is accomplished by working with small doses upward to the therapeutic effect, and not tolerance. Tolerance is a quantitative as well as a qualitative factor.

The insoluble bismuth preparations create a reservoir of a spirocheticide and the gradual absorption of the product is responsible for prolonged effects, especially with the irregular patient.

The serological reactions of fifty-one patients failed to become negative under combined simultaneous therapy. The serological reactions of five of these patients became negative with additional bismuth injections. Bismuth is a very valuable drug.

Fifty-one patients with all stages of syphilis

became sero-negative with an average of a little over nine combined simultaneous treatments. Of these twenty-five received 0.45 grams of neoarsphenamine per dose, four received 0.4 grams per dose, twenty received 0.3 grams per dose and one received 0.2 grams per dose. Conservative doses of an arsenobenzene are effective.

There were one hundred two patients in all stages of syphilis. Fifteen percent were primary, twenty-three percent were secondary, forty-seven percent were latent and fifteen percent were tertiary. Almost one-half of the syphilis reporting to this clinic was asymptomatic, the disease being discovered most frequently by the internist in a routine examination.

Regularity is one of the most important factors influencing the results. The difference between regularity and irregularity is so apparent that in justice to the report, the patients are so classified. Regularity is especially important in dealing with early undisseminated syphilis. Credit for good results in irregular patients is often due to the insoluble bismuth used, which produces a prolonged effect.

In the sero-negative primary group, one hundred percent remained sero-negative under combined therapy.

Of the sero-positive primary group, one hundred percent of the regular patients became sero-negative with an average of eleven combined treatments, and fifty percent of the irregular patients became sero-negative with an average of seven treatments.

Of the secondary group, sixty-six percent of the regular patients became sero-negative with an average of nine combined treatments, and seventy percent of the irregular patients became sero-negative with an average of eight combined treatments.

Of the latent group, sixty percent of the regular patients became sero-negative with an average of eight combined treatments and twenty-eight percent of the irregular patients became sero-negative with an average of eleven combined treatments.

Of the tertiary group, only one of the regular patients became sero-negative with twelve combined treatments, and one patient of the irregular group became sero-negative with twelve treatments.

Those who think the intentional development of secondary syphilis produces a better syphilitic defensive mechanism may find interesting the report that less treatments were required to produce negative serological reactions in secondary syphilis than in primary syphilis, although the percentage of patients responding to therapy was greater in primary syphilis. An interesting and paradoxical observation here is that in secondary syphilis, more irregular patients than regular patients responded to less therapy. The action of the defensive mechanism in secondary syphilis is a most unusual one.

With late syphilis the best effects upon serological reactions are in patients who have no symptoms of syphilis or apparent tertiary lesion. The serological reactions of patients with tertiary syphilis are noted for resistance to therapy, and clinical improvement or arrest of the process is about all that can be hoped for, since the spirocheta pallida has had ample time for deep entrenchment in scars and inaccessible parenchyma.

Conclusions:

1. The greatest percent of revised serological reactions under combined simultaneous bismuth arsenobenzene therapy are obtained in early syphilis.

(2) This type of treatment is notably free from serious drug reactions.

(3) Regularity in treatment produces more reversed serological reactions.

(4) The Kahn test is more sensitive than the Kolmer Wassermann test, but one should be sure he is dealing with syphilis before relying entirely upon the Kahn test.

(5) An early lapse of treatment frequently is followed by relapse of serological reactions. Relapsed serological reactions are very resistant to the effects of subsequent therapy.

(6) Serological reactions then are a guide, not the goal, of therapy.

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BREAST TUMORS*

(OBSERVATIONS ON THE DIAGNOSIS, SURGICAL PATHOLOGY AND TREATMENT)

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As a result of the activities of medical societies, individual physicians and such organizations as the American Society for the Control of Cancer, with their education of the general public regarding neoplastic disease, patients tend to present themselves earlier to physicians if any unusual

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"lump" or "nodule" develops. This is especially true of women with breast lesions. On this account breast tumors are usually seen when a correct clinical diagnosis is more difficult to make. However, physicians are given their opportunity for instituting proper treatment at a time when good results may obtain.

Because of this state of affairs, there is a great increase in the physician's responsibility for making a correct diagnosis of breast lesions, for if the tumor is a malignant neoplasm it must be recognized and a proper radical operation performed before adjacent structures are involved. Harrington[1] and others have shown in breast cancer that "the presence or absence of lymphatic involvement at the time of the operation is the most important factor in the prognosis".

When a patient presents herself with a breast tumor, the attending physician must analyze carefully all signs, symptoms and findings and he must not be misled nor give too much credence to artificial barriers in any particular case, as for example, the age of the patient, or location of the lesion, or the presence or absence of fixation of the growth, for each tumor must be considered individually and it must always be kept in mind that a malignant tumor is a frequent possibility and early correct diagnosis is of great importance.

Common Benign Breast Tumors. The most common benign tumor is the so-called simple cyst. It may occur in the breast of either sex and at any period from infancy to old age, although the average age for its occurrence is about forty-four years[2]. The size of the cysts may vary from less than a centimeter in diameter to one large enough to contain 500 cubic centimeters of fluid. Any portion of the breast parenchyma may be affected by the cyst and the contents may vary from a clear yellow to a thick dark fluid. These cysts are usually round or nodular "lumps", hard, soft or fluctuant. Transillumination of a breast containing a cyst, as first described by Dr. Max Cutler, reveals a translucency in the cyst,[3] unless hemorrhage has occurred into the cyst lumen, then the cyst is very dark when transilluminated.

Microscopic examination of the wall of a simple cyst usually reveals a fibrous wall with a low epithelial lining. Clustered around the edge of the cyst are acini of breast tissue. Occasionally these "blue dome" cysts may reveal a cancer in their wall. Multilocular cysts of the breast are seen occasionally. They may be due to rupture of simple cysts, one into another, or they may have had their multilocular form from their beginning.

There is a type of chronic proliferative mastitis, the so-called "Schimmelbusch disease" which has been considered as a precancerous lesion by some observers (Schimmelbusch)[4] while by others[5] the disorder is considered benign. This neoplastic disease is generally characterized as a "shotty breast" and is composed of many small, firm nodules scattered through the breast. The disease frequently is bilateral and may be diffuse or involve only a quadrant of the organ. Freshly cut surfaces of a breast, the seat of Schimmelbusch disease, usually show the white fibrous breast stroma with a mottling of yellow to light brown areas, one to three or four millimeters in diameter. The latter areas many times "pout" up above the surrounding breast tissue when cut across. Microscopically the changes found are chiefly a proliferative mastitis with areas of cystic change. The acini cells may so increase that the spaces are completely filled. It is my opinion that the disorder is frequently a precancerous lesion and a breast containing such lesions is best treated by removal of the affected area, or, better yet, a simple amputation if the whole breast is involved.

The best treatment for any of the variations of cystic mastitis is excision of the involved area, with immediate microscopic examination of the tissue. If malignancy is found a radical operation can be performed. I do not think it worth while to aspirate a cyst cavity. Although this procedure

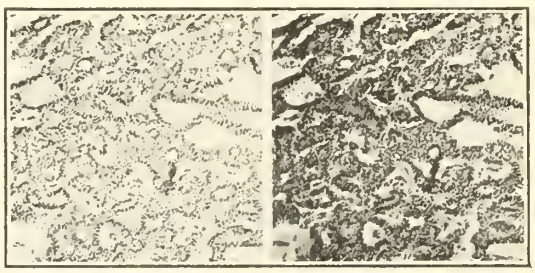


Fig. 1.

Grade 1 adenocarcinoma. The cancer cells are almost all arranged in acini and the individual cancer cells tend to approach the appearance of normal breast tissue cells.

may cause a disappearance of the tumor, it leaves the actual pathology present an unsolved and unknown quantity.

The surgical removal of a portion of the breast with a good closure leaves only an insignificant scar and is of no importance so far as the function of the organ is concerned.

Fibro-epithelial Tumors. These benign tumors rarely occur in the breasts of men and young girls, but they are comparatively common in the breasts of adolescent girls. Approximately one-third of patients with fibro-adenoma of the breast according to Greenough and Simmons[6] had pain in the affected breast. In women this pain is likely to be more noticeable at the menstruation time. With the establishment of lactation, fibro-adenomas may make their appearance for lactating fibro-adenomas have been described. Fibro-adenomas are usually firm, rounded and movable and they occur most frequently in the following order in different portions of breast; upper outer quadrant, lower outer quadrant, central, upper inner quadrant, lower inner quadrant[7]. Multiple fibro-adenomas may be present in the breast or breasts in approximately twenty percent of the cases. These tumors rarely form attachment to the skin or fascia or

retract the nipple. Deep pressure on a fibro-adenoma frequently gives a sensation of elasticity, and if the growth is cystic it may fluctuate.

Grossly, fibro-epithelial tumors are characterized by a slightly nodular outer surface. Cut surfaces reveal a firm, white tumor which swells after cutting, much as a fibromyoma.

The microscopic features of fibro-epithelial tumors are irregular interlacing whorls of fibrous connective tissue, and scattered throughout this stroma are irregular epithelial lined cysts and strands of epithelial cells. Edematous, myxomatous and cystic changes are sometimes found in these tumors and rapid alteration in the size or texture of these neoplasms may herald a malignant change. Surgical removal of the growth is the universally approved treatment for these tumors.

The new growth can usually be removed through a radial incision and since they so frequently occur in younger women, it is important to use great care in saving as much of the breast tissue as possible. Deaver and MacFarland in a series of seventy patients with benign fibro-epithelial tumors of the breast had thirteen to return to them, six patients because of recurrence in the same breast and seven because of tumors in the opposite breast. Occasionally malignant changes are found in fibro-epithelial tumors, fibro-sarcoma is more commonly met with than carcinoma.

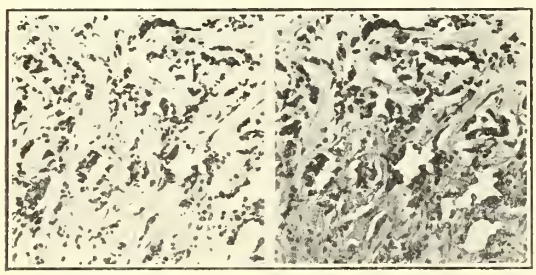


FIG. 2.

Grade 2 carcinoma. The epithelial cells although arranged almost altogether in acini, have lost their columnar form (adult breast tissue character) have different staining characters and are more embryonic in type. (X60)

Intraductal and Intracystic Papillomas. This interesting group of tumors is usually seen in adults and is frequently accompanied by a sanguinous or sero-sanguinous discharge from the nipple. The lesion may be located close to the nipple or in the deeper structures of the breast. By the aid of transillumination of the organ[3] it is frequently possible to distinguish more than one tumor and their approximate location. The bloody discharge in the ducts or cysts in the breast is singularly opaque and aids greatly in localizing the lesion. It has long been recognized that these papillomas may become malignant and metastasize to distant parts in the breast and rarely to the axillary lymph nodes. Most papillomas belong in the group of grade I papillary adenocarcinoma described by Broders.

The gross appearance of these breast papillomas is similar to that of papillomas in any other location so far as structure is concerned. They do show a marked tendency to bleed and in searching for them in a breast this hemorrhage into a duct can be traced from the nipple until the neoplasm is found. It is surprising how small a lesion may cause such a large extravasation of blood.

Microscopic examination of these papillomas usually reveal a definite capsule or duct wall from which the frond-like projections of the tumor originate. There is a delicate stroma which carries blood channels to different portions of the new growth and the covering of the tumor is usually a single to triple layer of epithelial cells covering the projections of the tumor.

Simple mastectomy is the usual treatment for these papillomas. If only one lesion can be found by transillumination, perhaps excision of a portion of the breast would be sufficient, but since the lesions tend to be multiple there is the danger, in only partial excision, of having a continuation of the discharge because of papillomas left behind. Bloody discharge from the nipple is not pathognomonic of papilloma for this sign is sometimes associated with breast carcinoma or Paget's disease.

Malignant Breast Tumors. There are three types of malignant tumors most frequently found in the breast, carcinoma, sarcoma and so-called Paget's disease. The former is by far the most common. It is a good working rule that every breast tumor should be considered malignant until proven otherwise.

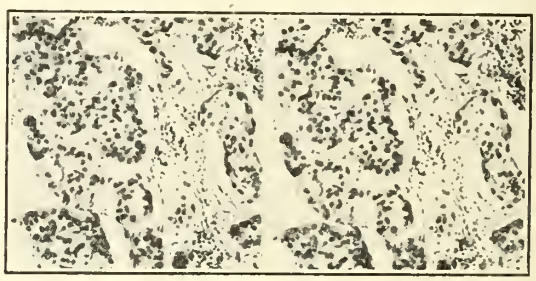


FIG. 3.

Adenocarcinoma grade 3. These cancer cells show less differentiation as indicated by their irregularity of size, staining qualities, and loss of columnar form. The stroma elements are less prominent. (X60)

Carcinoma is found most commonly in the following locations in the organ, in about the order named: upper outer quadrant, central zone, lower outer quadrant, upper inner quadrant, lower inner quadrant. According to Deaver and MacFarland the most early finding in cancer of the breast is the presence of a tumor or "lump" and next in frequency is pain. In a large series of cases of breast carcinoma, pain was present in only nine percent[8], so that really pain is found in only a small percentage of breast cancer and this is one of the tragedies of the disorder because a symptomless "lump" may be watched for months and finally found to be carcinoma. Localized and referred pain associated with carcinoma of the breast is complained of as the disorder involves adjacent

skin, fascia and nerves. Pain in the breast is, however, frequently found associated with granulomatous lesions of the organ and with benign tumors, especially of the fibro-epithelial type. Changes of the skin over breast carcinoma, retraction of the nipple and ulceration of the lesion are late manifestations of the disorder, and so far as early diagnosis and treatment are concerned, are relatively unimportant. The gross appearance of breast cancer needs no description.

The grading of cancer as originally described by Broders is a great advance in guiding the treatment and an aid in the prognosis in neoplastic diseases. This observer's first studies were made on squamous cell epithelioma of the lip. Since that time he has gradually increased the use of grading of cancer until now it is applicable to most common malignant neoplasms. The basic principle in the grading of cancer is the fact that the more a neoplastic tissue resembles the adult normal type of tissue from which the neoplasm arose (differentiation) the less malignant it is. Thus in a breast cancer the more nearly it approaches the normal adult breast tissue, the less malignant the tumor is and on the other hand the less the breast cancer resembles breast tissue, that is, the more undifferentiated it is, the more malignant is the carcinoma.

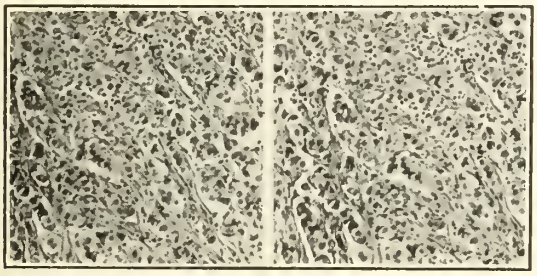


Fig. 4.

Adenocarcinoma grade 4. These malignant tumor cells reveal practically no differentiation. They are almost all round or oval and show great variation in size and staining qualities. The stroma is of very minimum quantity and the cancer cells although arranged in part in acini, in some areas show arrangement in sheets of cells. (X72)

Broders has divided cancer into four different grades—1, 2, 3,[9] 4,[10]; grade 1 is the least malignant and grade 4 the most malignant. A breast carcinoma in order to be qualified as a grade 1 cancer must show differentiation in from three-fourths of the tissue to almost all of the tissue as determined by a study of microscopic slides. Grade 2 carcinoma must reveal differentiation in from three-fourths of the neoplasm to one-half and grade 3 and grade 4 show differentiation in from one-half to one-fourth and one-fourth to practically no differentiation.

Grade 1 cancer of the breast does not tend to metastasize early, if at all, while the higher grades of malignancy show a proclivity in the opposite direction.

In order to simplify the nomenclature regarding carcinoma of the breast, it seems best to consider all carcinomas as adenocarcinomas grade 1, 2, 3, 4, and qualify them as colloid adenocarcinomas, etc., as demanded by microscopic findings. For example, most of the so-called scirrhus cancers of the breast are in the lower grades of malignancy and this accounts for the reputation they have earned of being rather slow growing and late to form metastasis.

We must always remember in considering the pathology of breast carcinoma that the lesions may be occasionally bilateral; that they can arise apparently simultaneous in several different foci in a breast and that the lesions tend to metastasize to the adjacent lymph nodes, the bones and other breast.[11] [12]

Occasionally anomalous breast tissue along the anterior axillary fold will become painful and tender and suggest either a carcinoma or metastasis of carcinoma and present real difficulty in diagnosis. Likewise one will see axillary lymph nodes which are obviously the seat of metastatic carcinoma from the breast and only after careful search through the excised breast will a small area of carcinoma be found.

The surgical treatment of breast carcinoma is now fairly well standardized and the Meyer or Halstead operations and their modifications are adequate. Incisions and minor details of the procedure are varied as indicated by the position of the neoplasm and requirements for nutrition of the skin flaps.

Sarcoma of the breast as usually seen develops from a fibro-epithelial tumor. A history is frequently given of the presence for a long time of a tumor which suddenly began to grow larger. Usually the skin is not attached to the lesion and glandular involvement is not noted. Microscopically sarcoma arising from a fibro-adenoma usually reveals an increase in the stroma cells and the presence of spindle cells containing mitotic figures so common in this disorder. Cystic and myxomatous changes are frequently noted.

Mastectomy with removal of the adjacent muscles is the operation of choice. Usually, however, a clinical diagnosis of carcinoma of the breast has been made and the usual radical operation for breast carcinoma performed before the true nature of the disease is discovered. Theoretically, excision of the axillary lymph nodes is not necessary, for the disease is not disseminated through lymph channels.

Paget's[13] disease of the breast is the least common of these three malignant neoplastic breast diseases. Controversies early developed regarding the exact point of origin of this disorder, its significance and its sequences. There are four chief opinions regarding Paget's disease: (1), that it is a dermatitis or eczema of the skin; (2), that it is a primary squamous cell epithelioma of the skin; (3), that it is a carcinoma developing from the lactiferous ducts in the nipple and suderiferous ducts of the skin, secondarily involving the skin and breast tissue; and (4), that it is a carcinoma beginning deep in the tissue of the breast and

growing up along the ducts of the nipple and finally invading the skin. I agree with Broders that "Mammary Paget's disease *per se* is a squamous cell epithelioma usually of a low grade of malignancy. It not uncommonly is associated with adenocarcinoma that has its origin in glandular portions of the breast. It may also be associated with carcinomatous change in the duct epithelium and finally as a rule, the processes are entities and are not due to malignant invasion from one situation to another."

Paget's disease is usually characterized grossly by a scaly, eczematous, red lesion of the nipple, associated with a serous or serosanguinous discharge which may slightly stain the clothing. The lesion usually has been present for some months before the patient thinks it of enough importance to consult a physician.

The common microscopic characteristics of the lesion are hyperkeratosis with alteration of rete pegs, which frequently are composed of large, clear, vacuolated cells with single or multiple nuclei diagnostic of Paget's disease. These cells are really epithelioma cells.

Surgical treatment should consist of radical breast amputation because the disorder spreads by direct extension and by the lymph channels as any other epithelioma.

Chronic Granulomas of the Breast Resembling Malignant Neoplasms. The two chronic granulomatous disorders which resemble malignant tumors are gumma and tuberculosis. In the former, a positive blood Kolmer should always arouse one's suspicions as to the real cause of the apparent new growth and improvement under antiluetic treatment will clinch the diagnosis. Tuberculosis of the breast especially if it is of the sclerosing type gives all the common findings of carcinoma and is frequently diagnosed as such. On the other hand if one finds multiple fistulæ, enlarged axillary lymph nodes and retraction of the nipple a clinical diagnosis of tuberculosis of the breast is warranted. If doubt exists excision of one of the breast nodules with examination by the frozen section method will reveal the true identity of the disorder.

If the patient presents herself with a breast nodule and the diagnosis is not evident biopsy with microscopic examination of tissue should be considered seriously. If possible, the microscopic examination, with fresh frozen sections, should be made at the time of the removal of tissue, so that if further operative procedures are necessary they can be performed at this time. If it is necessary to wait for a few days for a diagnosis that is to be much preferred to "watching" a breast tumor and finding out later it is a malignant tumor.

Dr. Francis Carter Wood about six years ago in a series of carefully controlled experiments found that so far as experimental malignant tumors were concerned the biopsy of these neoplasms had no influence on either the rate of their growth or on the development of their metastasis.[14]

Bumpus studying bladder neoplasms in man has likewise made the observation that so far as he can determine, removal of tissue for diagnosis has in no way influenced the rate of growth of the tumor.[15]

If the excised breast nodule proves to be malignant, its grade can be determined and with this armament of information the surgeon is better equipped to combat the neoplasms.

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ABDOMINAL MANIFESTATIONS OF CHEST DISEASES*

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The purpose of this paper is to discuss the abdominal manifestations of chest diseases, and more especially their diagnostic characteristics in relation to true abdominal conditions. Much importance must be attached to an accurate diagnosis, for in the former the treatment is mostly medical while in the latter is surgical.

It has been the unhappy experience of physicians on a number of occasions to be confused as to the cause of an abdominal symptom. Many times an acute lobar pneumonia has been mistaken for an acute appendicitis and a coronary thrombosis for a ruptured peptic ulcer. After the patient has submitted to surgery a realization of the mistake makes the physician proceed more cautiously with his next similar case.

Many cases have been reported of chest lesions simulating true abdominal conditions, and yet with all diagnostic skill these two types may be confused.

To better understand the cause of this confusion a brief outline of the nerve supply of the thorax

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and abdominal viscera is necessary. Pain in the abdomen, due to chest condition, is usually referred over the lower six intercostal nerves. These are distributed to the lower part of the pleura, diaphragm, skin and muscles of the abdominal walls. Painful symptoms in the upper abdomen may be due to irritation of the seventh, eighth and ninth intercostal, while a painful lower abdomen may be due to irritation referred over the tenth and eleventh intercostal nerves.

The phrenic nerve, arising from the third, fourth and fifth cervical segments, innervates the pleura of the central tendon of the diaphragm, while the lower six intercostal nerves supply the pleura of the costal portion of the same. The parietal pleura also receives branches from the upper six thoracic nerves.

The lungs and heart receive fibers from the first six thoracic nerves, the aorta from the first ten, and the abdominal viscera from the fifth to the twelfth inclusive.

MacKenzie stated that impulses are carried to the cord by the sympathetic fibers and then carried along the cerebro-spinal nerves to the periphery.

Epigastric pain that is cardiac in origin is the result of irritation of the fifth and sixth thoracic nerves. Acute pleuritis, especially if it is diaphragmatic and involving the costal portion, is referred to the abdomen by way of lower six thoracics. If the lower lobe of the lungs be involved, abdominal pain may result, due also to irritation of the lower six thoracics. In aortic diseases, pain is referred to the abdomen by way of the seventh to tenth thoracic nerves. Pain in any instance may be referred to the opposite side of the lesion due to the strong stimulation across the segments of the cord and the anastomosis between the intercostals.

From this type of innervation it is evident that nature intended to restrict the movements of the abdominal musculature in order to lessen the damage of inflamed tissues of the chest.

Lobar pneumonia, especially of the right side, has been the source of embarrassment to many a physician. The doctor is summoned to see a patient suffering with acute abdominal pain, vomiting, distention, muscular rigidity and tenderness over the appendiceal region. Examination of the chest reveals nothing. There seems to be no question as to the diagnosis of the illness. The family are advised that the patient is suffering with an acute appendicitis and needs an immediate operation. They may be rather reluctant to give their consent to this sudden proposal, but the emphatic demand of their physician convinces them and the patient is rushed to the hospital and operated, but to the amazement of the surgeon the appendix appears normal. In a few hours or the following day the patient presents symptoms of a well-defined lobar pneumonia.

Such instances as these, though well understood by the profession, are not excused by the patient or family, especially after the physician had exhibited such positive conclusions. To them the doctor had erred miserably.

But in justice to the physician such cases have been reported where an early diagnosis of a pneumonia was impossible in this type of symptom.

Chatard in his observations noticed that 7.7 percent of his cases suffering with lobar pneumonia presented abdominal pain while Griffith reports a higher percentage in children. There is no doubt that children are more prone to abdominal manifestations in pneumonias than adults.

The abdominal pain of lobar pneumonia may be mistaken for symptoms of gallstone colic, perforating ulcer as well as an acute appendicitis. There may be no manifestation of any chest pain. If the pain is in the region of the gall bladder, there may be a distinct radiation downward into the lower right abdomen. With these symptoms the true pathology is usually located in the central lobe of the lung. Diagnosis is more confusing in patients who give a history of previous gall bladder attacks.

A few cases have been reported in which the symptoms have simulated a perforating duodenal ulcer, though this condition is rather rare.

In imitating acute appendicitis, lobar pneumonia often succeeds to a high degree. In the absence of all thoracic symptoms there may be nausea, vomiting, epigastric pain followed in a short time by pain, muscular rigidity and acute tenderness in the right iliac fossa. In children there is usually tympanitic distention. (Abdominal tympanites of lobar pneumonia usually appears late in the disease when the patient is in a state of toxemia. This is due to relaxation of the musculature coat of the intestines.) The temperature may be normal or slightly elevated and a leucocyte count may be well below twenty thousand. Respiration may be only moderately increased. The symptoms may go so far as to simulate a ruptured appendix.

A case which came to my attention was of a boy nine years of age who had taken suddenly ill with vomiting and severe pain in the right lower quadrant of the abdomen. The parents called it indigestion, especially since he had had previous attacks of like nature which each time followed the eating of a hamburger sandwich. Examination revealed a respiration of 34, pulse 118, temperature 100.2 degrees. There was marked rigidity and tenderness on pressure over the right iliac region. Chest examination revealed nothing. A leucocyte count of 15,000 with a history of the previous attacks and the presenting symptoms caused a diagnosis of an acute appendicitis to be made. Due to the absence of the father, the mother wished to delay surgery.

Next day the pulse was 130, temperature 102.4, with the same amount of tenderness and rigidity over the right iliac region. On the fourth day there was a slight cough, a few rales in the right lower chest with a temperature of 103.2 and a pulse rate of 136, plus an abatement of his abdom-

inal symptoms. A white count at this time was 22,000. The patient was beginning to show the true meaning of his abdominal symptoms.

Though we see cases which are truly problems, yet in many others we have certain diagnostic characteristics which may differentiate the two conditions. They are as follows:

(1) Even though at times the leucocyte count may be of no aid, yet in acute appendicitis do we rarely find a white count above 20,000.

(2) Usually lobar pneumonia begins with a distinct chill and rather high temperature plus increased respirations.

(3) There is usually a slight cough upon respiration in the chest condition, and pain is increased.

(4) Abdominal pain, due to lobar pneumonia, usually diminishes somewhat upon gentle, deep pressure, while in acute appendicitis it is aggravated.

(5) Lambert of New York observed that there is a short space of time between expiration and inspiration when the abdominal wall relaxes if it is due to pneumonia.

(6) Flexion, extension and hypertension of psoas do not aggravate abdominal pain in pneumonia as in appendicitis.

(7) If abdominal tympanites be present, the reducing of such is more difficult in lobar pneumonia than in appendicitis.

(8) Rectal examination may diagnose definitely a true appendiceal involvement.

(9) Roentgen ray, if available, may be of great value.

Acute pleurisy, like pneumonia, often gives similar abdominal symptoms. The pain usually is referred to the hypochondriac region of the affected side and may not be affected by breathing. Diaphragmatic pleurisy is more often mistaken for true abdominal conditions. The pain, as a rule, is transferred to the region of the gall bladder, laterally and above the navel region, and into the lumbar region.

I recall one male patient who was admitted to the City Hospital in an apparent state of shock. There was an intensely agonizing pain in the epigastrium. Due to its severity, the patient was unable to tell whether it was aggravated by breathing. The temperature was below 100 degrees and the pulse about 100. The epigastrium was "board-like" and extremely tender. Chest examination at the time of admission revealed nothing. There was no history of a chest cold or an exposure to one. A diagnosis of ruptured peptic ulcer was made and the staff surgeon summoned. Upon his arrival the surgeon, not sure of his diagnosis, used splendid judgment in deciding to wait a few hours for further symptoms. He was well rewarded for his decision for in a few hours the patient developed a cough, the pain became less severe and was distinctly aggravated on breathing. Some diagnostic features of acute pleurisy from an abdominal condition are as follows:

(1) Pain as a rule in acute pleuritis is more intense during inspiration, usually superficial and not deep seated.

(2) There may be tender points or pain in the neck and shoulder region, due to phrenic irritation if the diaphragm is involved.

(3) There is often a sudden relief of pain due to the separation of inflamed tissues by an effusion though at times the pain of appendicitis is relieved by the rupture of an appendix.

(4) Many of the characteristics of lobar pneumonia also apply to acute pleurisy.

Coronary lesions are also responsible for many abdominal symptoms. In fact, since autopsies are more numerous, I believe we are conscious of the fact that formerly these lesions were greatly overlooked and even yet are improperly diagnosed. The reason is simple, since coronary lesions, especially those with anginal symptoms, give no signs of heart disease. The patient complains to his physician of gastric distress, flatulence, nausea, vomiting, belching, etc., which is particularly noticed after a meal. These patients have been treated for all types of gastro-intestinal disease with only a slight relief from symptoms. In fact after having x-rayed and done repeated laboratory tests on these patients, they are apt to be pigeonholed as neurotics.

The most obscure type of coronary lesion is that of angina pectoris, when it presents abdominal manifestations. Angina pectoris, whether or not it be a true coronary lesion, usually gives classical symptoms of pains radiating in the left arm, neck and shoulder, etc. In these atypical cases, the only painful manifestation is in the epigastrium. These patients usually complain of fullness and distention of the abdomen, nausea, belching and perhaps vomiting. The attacks usually follow a heavy meal and often after the patient belches or vomits, gets a partial relief. These symptoms are often classified as "acute indigestion".

The pains of angina pectoris may also be referred to the region of gall bladder or kidney and may be confused with gallstones or renal colic.

In cases of acute coronary obstruction the onset is severe and sudden. If the branch of the left coronary is affected there is apt to be abdominal manifestations. The patient is seized with a sudden and excruciating pain in the epigastrium. There may be nausea and vomiting. The symptoms of shock are in evidence and the patient bears an expression of great anxiety. Examination of the abdomen usually reveals a tender epigastrium with muscle rigidity. The temperature may rise to 101 or 102 degrees, and the leucocyte count may reach twenty thousand. The attack may last several hours with little or no relief of symptoms. These symptoms are often mistaken for a ruptured duodenal ulcer.

About one year ago I saw a patient who presented such a puzzling group of symptoms. A

male fifty-three years of age was suddenly seized with a severe pain in the epigastrium. The pain was very excruciating and of the boring type. There was a marked amount of belching, nausea and vomiting. Examination revealed a marked tenderness in the epigastrium accompanied by muscular rigidity. The temperature was 100.5 degrees, pulse 110, and a leucocytosis of 18,000. The patient was in a severe state of shock.

To make the diagnosis more confusing the patient gave an ulcer history. For the past five years he had complained of acid stomach, pains in the epigastrium and marked amount of flatulence after eating. These symptoms were usually relieved by the taking of bicarbonate of soda.

A diagnosis of ruptured duodenal ulcer was made and an operation advised. He refused and asked for further consultation, the consultant affirming the diagnosis. He again refused, so was given a large dose of morphine and kept at rest.

In a few hours the pain began to subside. On the following day his condition was much better and he felt entirely relieved. A few weeks later a gastro-intestinal x-ray was made which revealed nothing. One month later he died suddenly of a heart disease.

A second case of this type was a female fifty-six years of age who for the past ten months had complained of a "misery" in the pit of the stomach and abdominal distention after a heavy meal. One day after attending a large family dinner she was suddenly seized with a severe pain in the epigastrium that radiated into the right upper quadrant. The upper abdomen was markedly distended and tender. The temperature was 100 degrees and the pulse rate 115. In a short time she developed symptoms of shock and died in about one hour from the onset of her symptoms. The family submitted only to an abdominal autopsy which revealed nothing. However, without a doubt, death was due to a coronary thrombosis.

Diagnostic characteristics of coronary lesions with abdominal manifestations are as follows:

(1) Most of these cases present some cardiac symptom such as weak heart action or feeble pulse, or cyanosis with gradually increasing symptoms of cardiac failure.

(2) Some evidences of arterial disease, such as thickened radial, bronchial or temporals, or sclerosed retinal or conjunctival arteries.

(3) Coronary lesions are most apt to occur after middle life.

(4) By the use of the electro cardiograph coronary lesions may be demonstrated.

(5) In any case of presenting stomach symptoms which are not relieved by the usual medication for such conditions be suspicious of a coronary lesion.

Pericarditis may cause a sharp stabbing pain in the region of the umbilicus. It has been noted that children are prone to these symptoms. However, the diagnosis should not be confusing since a friction rub may be noted and usually there is a history of an acute rheumatic involvement.

Myocarditis and valvular defects with failing compensation may give rise to epigastric and hepatic pain, nausea and vomiting. At times there is flatulence and abdominal distention. Here again the diagnosis is not difficult since there are usually other presenting signs of cardiac pathology.

Aneurisms of the thoracic arch may give upper abdominal symptoms especially if there has been some involvement of the ribs and thoracic vertebræ in volving the lower eighth or ninth thoracic nerves.

Mediastinal tumors may cause a constant or paroxysmal pain that is referred to the abdomen through the involvement of the intercostal nerves.

Tuberculosis, as we all know, may give symptoms of indigestion such as distention after eating and pain in the epigastrium. These patients may be either constipated or have a persistent diarrhea, accompanied by nausea and vomiting. However, malaise, loss of weight, cough, temperature, etc., indicate the true diagnosis.

Diaphragmatic hernial may give colicky pains in abdomen accompanied by nausea and vomiting. In fact any chest condition that might irritate the lower thoracic and intercostal nerves which send branches to the abdomen may be guilty of causing abdominal symptoms.

In concluding, I would like to summarize as follows:

(1) Abdominal manifestations of chest diseases are, as a rule, the result of reflex stimulation over the lower six thoracic and intercostal nerves.

(2) Lobar pneumonia, acute pleurisy, coronary lesions, and cardiac diseases with failing compensation are the chest conditions which are most apt to give confusing abdominal symptoms.

(3) When in doubt as to a diagnosis, the best policy is to wait. Sooner or later some diagnostic symptom will develop that will decide the issue.

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Discussion

Robert G. Moore, M.D. (Vincennes): Confusion as to the differential diagnosis between abdominal and chest conditions, particularly acute chest conditions and acute abdominal conditions, has long been recognized. Perhaps there is no problem in diagnosis which is as frequently discussed among medical groups of this kind as the question of differential diagnosis between acute

lobar pneumonia and acute appendicitis. Doubtless that has been accentuated, at least in the last twenty-four or thirty years, due to our paying more attention to acute appendicitis than we did formerly. After all, it is a problem of diagnosis in which we have made very little progress. It is a problem which calls forth at times all of our skill in diagnosis. I believe that our better understanding of reflex and referred pain has contributed more to our understanding of these conditions than any other one thing. In this problem there is no laboratory test, no instrument of precision which will make a diagnosis for us, or even give us aid in making a diagnosis. Several years ago when we were making leukocyte counts in every condition, it was noted that in appendicitis the count was rarely over 25,000, while in acute lobar pneumonia it was almost always more than that. However, we have learned to recognize that there are many exceptions to that rule, and that we are likely to find the exception in the next difficult case.

Although Doctor Harrison's paper was limited to acute diseases of the chest, I have been reminded recently of a condition which should be recognized, a chronic condition more or less, a disease of the chest, namely, a left-sided pleural effusion producing, or simulating, the symptoms of abdominal tumor, the pain being referred to the abdomen, often to the site of a tumor. I recently saw a patient in whom there was a large left-sided effusion. The patient was sent to the hospital with a diagnosis of abdominal tumor, as the pain was referred to the left upper abdomen, apparently to the spleen. In that case the spleen was displaced downward, a purely mechanical displacement, which receded as soon as the pleural effusion was withdrawn. This is a rather common thing, I believe.

Doctor Harrison's paper was very inclusive, so far as points in differential diagnosis are concerned. He deserves to be complimented on its excellent preparation.

HARRY P. ROSS, M.D. (Richmond): I would like to mention one point in the subject under discussion, and that is an often neglected lymphatic gland which lies neither in the abdomen nor the chest, a borderline affair giving symptoms of both conditions, a gland at the right side of the cardiac end of the esophagus. This gland is often affected in tuberculous diseases and acute processes. Its location and relation to the nerves are such that it gives symptoms of nervous disease, abdominal disease, and likewise referred pain to the chest.

I have heard it said, and found it safe to follow, that the longer it takes one to make up his mind in any condition, the further he is away from an acute abdominal disease; the more likely it is to be found in the chest, be it acute or chronic. I heard that mentioned recently by Dr. A. Fergus Hewat, one of our best internists, who is connected with the Royal Infirmary of Edinburgh.

INDIANA UNIVERSITY SCHOOL OF MEDICINE

(Seminar September, 1931)

DIAPHRAGMATIC AND INGUINAL HERNIAE

This patient, a white male, age sixty-eight, was admitted to the Long Hospital, September 15, 1931, complaining of a constant, dull ache in the epigastrium accentuated periodically by attacks of extreme pain. These attacks usually appeared about one hour after eating and lasted from one to twenty-four hours.

He was a former patient of the hospital, from February 25, 1927, to March 20, 1927, at which time a diagnosis was made of (1) paraesophageal hernia of the stomach, and (2) probable malignancy of the cardiac portion of the stomach. At that time he gave a history of attacks of pain in the epigastrium about one hour after eating which were relieved by taking food; these had been present for about one year at that time. Two weeks before admission he had lost about one pint of blood from the bowels. The past history was entirely irrelevant save for a number of "bilious" attacks with nausea and vomiting from no apparent cause during his boyhood, and a fall from a scaffold a "few" years prior to admission which left him with a weak back.

Physical findings were those of a markedly emaciated and anemic individual showing evident air hunger. Head, neck and thorax were uninforming. The abdomen was scaphoid in type and tender over the epigastrium, but no masses were palpable. There was a marked generalized arteriosclerosis.

Laboratory study gave evidence of a severe secondary anemia with a red blood count of 2,376,000. Gastric analysis showed no free and 22. A. P. total HCl. Stool examination was negative for blood.

X-ray studies revealed a definite hernia of the cardiac portion of the stomach posterior and to the left of the lower esophagus. This was about three inches in diameter and definitely irregular from the left posterior aspect. The opinion was given that the irregularity might be due either to an inflammatory or a malignant change. A compression fracture of the second lumbar vertebra was also noted.

Treatment consisted of a soft diet, dilute HCl, and sedative medication as needed. He was not considered to be a good operative risk, so that no surgery was attempted. A transfusion was advised, but refused by the relatives. His condition improved moderately and he was discharged.

On readmission he gave a history that the pain had continued to improve following discharge and that he was in good condition until six months prior to the present admission when he had the onset of the present complaints.

Physical findings of the head, neck and thorax are uninforming. The abdomen is scaphoid. There is some tenderness in the epigastrium and the liver is palpable. It is hard, but not apparently enlarged, nodular, or tender. The arteriosclerosis noted on the former admission is marked. The blood pressure is 220/100.

Laboratory study shows a red blood count of 4,280,000; hemoglobin, 75 percent; white blood count, 6,700; differential, 52 percent polymorph., 44 percent lymph., and 4 percent large monocyte. Urinalysis showed no abnormal findings. Gastric analysis on three occasions has shown free HCl ranging from 10 percent to 30 percent. Total HCl has ranged from 25 percent to 50 percent. Five stool examinations have been negative for blood. Blood was found in one of the three gastric analyses. Sarcinæ were present in one of the specimens.

X-ray study confirmed the findings of the former admission and in addition showed a marked tortuosity of the esophagus, an inguinal hernia which was overlooked on numerous physical examinations, and an irregularity at the constricted portion of the stomach which on subsequent fluoroscopic examinations was shown to retain varying amounts of barium. The opinion was given that this area is probably a small ulcer.

Treatment has consisted of a Sippy management with frequent feedings and alkaline medication. Under this regimen there has been considerable relief from the distressing symptoms so that morphine, which was being given at frequent intervals before admission, is now given only once daily.

From observation of this patient the thought has suggested itself that much of his distress is a result of a diaphragmatic spasm accentuating the ulcer pain.

In view of his continued life and the presence of free hydrochloric acid, malignancy may be considered unlikely. As to the possible origin of the hernia, the attack of biliousness as a youth and the presence of an inguinal lesion also suggest the probability that it may be of congenital origin.

The case is presented as one of interest because of the lack of physical findings and the simulation of a cardiac malignancy.

HYPERPARATHYROIDISM

(CASE REPORT)

P. J. Fouts, M.D.

J. C., age fifty years, a white married male, a molder by trade, entered the Indianapolis City Hospital, June 16, 1931, complaining of pain in the back, weakness, nausea, and marked loss of weight. He had had the usual childhood diseases, but had been remarkably well up until December, 1930. He had always worked hard and had had no severe illnesses. Family history irrelevant.

In December, 1930, the patient weighed 198 pounds and was feeling very well. However, at that time he began to notice severe pain in the back and pain shooting down the legs. He lost his appetite and subsequently lost considerable weight. He became so weak that he had to quit work, and, though not confined to bed, was unable to get around much. Within three months' time his weight dropped to 172 pounds. The patient received several injections for rheumatism from his local doctor without improvement. Later, after taking some medication by mouth, he began to vomit, and on June 16, 1931, he was admitted to the Indianapolis City Hospital.

Since being in the hospital the patient has had periods of nausea and vomiting. The weakness increased, and he continued to lose weight. From June 25, 1931, to July 29, 1931, the patient received calcium lactate, five grains three times daily, and cod liver oil, three ounces three times daily, and various sedatives, with no improvement. On June 18, 1931, x-ray of lumbar spine and pelvis showed decreased density of all bony structures and slight mottling of bones, suggesting possibility of generalized metastasis. On June 22, 1931, an x-ray of lung fields was essentially negative. Cystoscopic examination and pyelogram on July 16, 1931, were normal. Gastrointestinal series and barium enema were negative.

On September 1, 1931, the patient was transferred to the research ward. Physical examination at that time showed a very weak, pale, emaciated, white male, weighing 128½ pounds, lying flat in bed, and appearing chronically ill. Pupils were equal and reacted to light and distance. Fundi negative. Conjunctiva very pale. Ears negative. Nose negative. Mucous membranes of mouth very pale; tongue atrophic with numerous shallow fissures running over surface. Patient edentulous. In the neck there was a rather hard mass found, to the right of the midline, below the inner edge of sternomastoid muscle. It was about the size of a small marble. Left side of the neck was normal.

Lungs negative. Heart slightly enlarged to percussion; rate rapid and regular, with blowing systolic murmur at apex. The sounds were snapping in character.

Abdomen negative. Prostate felt normal. There was rather marked tenderness over the eleventh rib on the left.

All reflexes were active, but muscles seemed rather flabby. No abnormalities of bony skeleton could be made out on physical examination.

Laboratory findings: Urine—specific gravity, 1.009-1.013; trace of albumin on one out of four occasions; very occasional hyaline and granular casts in sediment. Blood urea nitrogen—46.2 mg. per 100 cc. Urea clearance—29.6 cc. blood, or 53 percent of normal. P. S. P.—18 percent in two hours. R. B. C., 2.44 million; hemoglobin, 30.7 percent; W. B. C., 5,380. Wassermann negative. Blood calcium—14 mg. per 100 cc. Gastric analysis showed free hydrochloric acid present after histamine. Reactions of muscles to faradic current normal. B. M. R.—5 percent.

X-rays—Skull, femurs, humeri, scapulæ also show decalcification and marked mottling.

Since being in the research ward the patient has had periods of nausea and vomiting, and has had a diarrhea most of the time. Temperature normal. Pulse slightly elevated.

On September 11th, 12th and 13th the calcium balance was determined. Sherman determined that diet containing 0.4 gram of calcium was sufficient for normal adults. Our patient received approximately a uniform calculated diet for four days before the three-day period of study.

Blood phosphorus was 3.54 mg. per 100 cc. on September 22, 1931. On September 14th his blood count had reached 1.82 million and hemoglobin 34.4 percent. He was started on iron and ammonium citrate. Since then he has apparently gained in strength, and his appetite has improved. His blood has increased to 2.34 million, with hemoglobin 39.6 percent. His weight is stationary at 120 pounds.

Kocher, in 1899, reported the first parathyroid tumors. Since that time there have been about eighty-eight cases reported. Von Recklinghausen, in 1891, first described the condition known as generalized ostitis fibrosa cystica, but it was not until 1904 that Askanazy found a parathyroid tumor in a woman with a disease which he called ostitis deformans without osteoid tissue. Since then thirty-two cases have been found in which the two conditions have been associated.

Mandl, in 1926, was the first to remove a parathyroid tumor by operation. Since then several tumors have been removed, as reported by Gold, Wilder, Boyd, Milgram, Stearns, Bick, and Barr, with varying results—mostly favorable.

The most important findings in the cases reported are:

1. High blood calcium.
2. Increased output of calcium in urine.
3. Negative calcium balance on normal diet.
4. Low blood phosphorus (not always present).
5. Bone changes—either cyst formation or generalized decalcification.
6. Abnormal calcium deposits over body—especially in urinary tract.
7. Hypotonicity of muscles (not always present).
8. Marked weakness.
9. Tumor of parathyroid.

These findings (except for the tumor of the parathyroid gland) have been reported by several workers (Collip, Greenwald, and Gross) after giving animals large doses of para-thor-mone.

This case shows all the classical findings except the hypotonicity. All the patients whose case reports I have read have been ill for from two to five years before muscle reactions were tested. Our patient has been ill for only ten months, and this may explain the fact that hypotonicity is absent. Because of those findings, we consider this a case of hyperparathyroidism. The marked loss of weight, anemia, weakness, and bone findings, along with the age of the patient, suggest malignancy with metastasis to bones, but no focus for the malignancy can be found. Why this patient should have such a severe secondary anemia that does not respond to iron we do not know.

We are now trying to get the patient in condition for an operation. We are giving sodium acid phosphate, fifteen grains four times daily, to see if this will not help to stop the excessive mobilization of the calcium. After that we expect to have the parathyroid tumor removed.

A DISCUSSION OF OXYGEN THERAPY WITH A DESCRIPTION OF THE OXYGEN CHAMBERS TO BE BUILT IN THE RILEY HOSPITAL

Harold M. Trusler, M.D.

There are many conditions with which the physician and the surgeon has to deal in which the administration of oxygen is one of the most important factors in successful treatment. In general, it may be stated that oxygen therapy is indicated whenever a patient for any reason manifests a persistent cyanosis not otherwise controllable.

Obviously many patients in whom such a situation exists are in a critical state and under these conditions the death rate is high irrespective of treatment. For this reason the value of oxygen therapy has been difficult to establish. The subject does not yield itself readily to experimental study in animals. A few facts are available, however. It has been shown that an atmosphere of pure oxygen is toxic and even fatal to normal laboratory animals. At death, which occurs in approximately seventy-two hours, the viscera of these animals show intense congestion. In an atmosphere of sixty percent oxygen, however, normal animals remain healthy and gain weight. As yet, experiments have not been devised to duplicate the pathological states for which the clinical use of oxygen is advised.

Estimation of the therapeutic value of oxygen administration, therefore, depends largely upon clinical observations, and such observations are always controversial or difficult to control. Furthermore, satisfactory equipment has not been available for the proper administration of oxygen to human subjects over any prolonged period of time.

Ordinarily oxygen is released from a pressure tank and conducted to the patient by means of a short rubber tube. It is then administered either by a funnel held a short distance from the patient's face or a small rubber catheter passed through the nostril into the throat, or by a small hood-like tent under which the patient must lie. It seems unnecessary to discuss the disadvantages of such equipment. Obviously there is no control of the oxygen concentration, no way of knowing whether the patient is getting an irritatingly high percent-

age of oxygen or a concentration so low as to be without value. Usually in all probability it is the latter. With such apparatus it is not likely that a patient can be given sufficient pure oxygen to do harm. The possibility, however, does exist. There are other objections. The patient who needs oxygen therapy likewise requires an atmosphere which is cold and dry and free from excess carbon dioxide. In this we find the chief objection to the ordinary hoods which are too often employed. They are for the most part suffocating devices. For these reasons oxygen, except for its use in anesthesia and resuscitation, has been employed for the most part as a measure of last resort. When used in this latter fashion it cannot be expected to save many lives.

In the face of these difficulties clinical observations have nevertheless continued to indicate a definite value in oxygen therapy. In an effort to secure the best possible results, the first oxygen chambers or oxygen rooms were built some years ago. In most cases the results were disappointing because of poor design and poor construction. Furthermore, it does not seem likely that permanently installed oxygen chambers can ever fulfill all the requirements of oxygen therapy. It is laudable, therefore, that manufacturers are now designing portable oxygen tents in which attempts are made not only to control the oxygen and carbon dioxide percentage but also to refrigerate, dry, and circulate the atmosphere under the tent. It is hoped that these devices may still further be improved.

In the specially constructed oxygen chamber, however, there are certain advantages and comforts to the patient which cannot be duplicated in the oxygen tent. We are grateful for the gift which makes such an installation possible in the Riley Hospital.

Construction of Oxygen Chamber. Before entering upon this project we took advantage of opportunities to investigate oxygen rooms already in operation. For much valuable information and help we are indebted to Dr. Peterman of the Milwaukee Children's Hospital, Dr. Boothby of The Mayo Clinic, and Dr. Thalhimer of the Michael Reese Hospital in Chicago. As a basis for the installation in the Riley Hospital, we chose the chambers designed by Dr. Thalhimer and to him we are especially indebted for structural details and methods of operation.

We are fortunate in that the Riley Hospital has in a suitable location two adjoining rooms approximately nine feet by seventeen, with low ceilings (eight and a half feet). The walls are constructed of ordinary building tile covered with heavy plaster and good enamel paint. The floors are concrete overlaid with terrazzo. Actual tests have proved to our satisfaction that these rooms, with doors and windows sealed, will retain an atmosphere of fifty percent oxygen with negligible losses over a twenty-four hour period. It is, therefore, quite feasible to transform these rooms into oxygen chambers without resorting to the customary caisson steel type of construction. In the front wall of each room there is to be a large air-tight door. After the patient is admitted, this door remains closed. For subsequent entrance or exit of nurse or doctor there is a centrally placed air-lock closet with a door into each room and a door to the outside. Through this air lock the necessary passage to and from may be accomplished with the minimum loss of oxygen. In addition, smaller air locks are provided for passing necessary trays and equipment to the nurse who remains inside.

By means of valves, gauges and pipe lines, oxygen is admitted from commercial tanks sufficient to raise and maintain the oxygen content of the room at fifty percent. An escape valve prevents the building up of pressure in the room. Since the patients to be treated in these rooms will usually be small children, the plans include an additional cross partition in each room making in reality four oxygen chambers, approximately nine by eight feet each. The two front compartments which communicate with the air lock can be operated singly and this will reduce greatly the cost of treating a single child. When the number of patients increases, more space is available by opening the door into the rear compartment of either main room.

All parts of the chambers are to be easily visible through sealed windows and for night lighting a special design is necessary to eliminate all electrical contacts from the chambers. It is to be remembered that anything which catches fire in fifty percent oxygen will flame like a torch, and for that reason absolute restriction of inflammable substances is to be maintained. A sprinkler system will be installed as an additional precaution.

Along one side of each chamber refrigerating coils will be installed for cooling. The frosting of these coils freezes out the moisture and thus controls the humidity. Temperature is controlled by a large radiator which is installed along the opposite side of the room and is equipped with a thermostat. By making the coils and radiators of sufficient size we provide for rapid change of temperature when desired. This arrangement likewise causes sufficient convection current to provide atmospheric circulation. Large trays of soda lime are placed above the coils and are replenished with sufficient frequency to remove excess carbon dioxide. Provision is also made for the removal of odors if necessary. The coils and trays are to be concealed by partial doors so constructed as not to interfere with the air circulation. The percentages of oxygen and carbon dioxide are to be checked by chemical tests at frequent intervals.

It should be noted that in the atmosphere of an oxygen chamber the carbon dioxide concentration should be kept below one percent. Inhalations of ten or fifteen percent carbon dioxide in oxygen are of value for hyperventilation in certain respiratory conditions, but such mixtures are for intermittent administration only.

Therapeutic Indications. In this preliminary report it is not my purpose to enter into the details of oxygen therapy or the results to be expected from the operation of oxygen chambers. It is generally conceded that oxygen therapy is indicated for the relief of anoxemia which may accompany any pulmonary or circulatory disease. These conditions will include pneumonia, pulmonary edema, atalectasis, and other postoperative lung complications, embolism, laryngeal or tracheal obstruction, also coronary occlusion or cardiac decompensation. However, oxygen treatment cannot be expected to repair the morbid anatomy of moribund states. Nor can it be said to increase resistance to infection. Oxygen can be expected to relieve the added strain and the lowering of resistance which occurs when a patient becomes anoxemic; with that aim it should be administered at the first appearance of cyanosis. Little can be expected of oxygen employed as a measure of last resort.

OBSTRUCTIVE JAUNDICE OF REGURGITATION TYPE WITH POSSIBLE MULTIPLE CAUSATIVE FACTORS

(CASE REPORT)

R. L. AMOS, M.D.

Mrs. G., age thirty-six, was admitted to the Robert W. Long Hospital as an emergency on September 23, 1931. Her chief complaint on admission was nausea, vomiting, and pain in her right hypochondrium. In May of this year, she was seized with an attack of nausea, vomiting and pain in the region of the gall bladder which radiated to the inferior angle of the right scapula. This pain has been remittent in character since that time, but has progressively grown worse. Previous to this present attack she states that she had a similar attack in March of this year which lasted until May, two weeks prior to the onset of her present attack. She was jaundiced with both attacks and had a marked pruritis of her entire body. Since May she has lost thirty-four pounds in weight. Her past history is negative for typhoid, pneumonia and syphilis. She states that her general health was perfectly good until the last of February of this year. Her menstrual history is essentially normal. She has been three times pregnant with two living children. She also gives a history of clay colored stools during her present attack.

On physical examination the following positive findings were noted: Moderate emaciation and marked generalized jaundice. There was a deep icteric tint to the sclera of both eyes. Teeth and gums were in poor condition. There was a marked posterior cervical adenopathy. Examination of heart and lungs was negative. Abdominal examination revealed no marked spasticity. There was marked tenderness and slight rigidity in the epigastrium, especially in the region of the gall bladder. The liver was palpable two finger breadths below the costal margin. On vaginal examination the uterus and cervix were freely movable. The uterus was in third degree retroversion, cervix badly lacerated, some pussy discharge from the cervix and cystic degeneration of the cervical gland.

Her blood pressure on admission was 105/50. Red blood count showed 3,470,000; white blood count, 8,600; hemoglobin, 79 percent.

Owing to her history of remittent attacks of pain and jaundice and her history of emaciation and weight loss since the onset of her present illness, a diagnosis of cholelithiasis and third degree retroversion of the uterus was made. Blood serology was normal. Icteric indices on two occasions showed 222 and 300 mgms., respectively. Indirect Van den Bergh showed 100 mgms. of bilirubin per liter of blood serum or twenty units. Direct Van den Bergh showed a dark reddish orange at one minute and a very dark wine red in one hour. Bleeding and clotting time was one and one-half and four minutes, respectively.

X-ray studies of the gastro-intestinal tract were essentially normal except for a marked constriction in the second portion of the duodenum and a slight dilatation below this constriction. In the gastric film there is an indefinite shadow along the lateral border of the second portion of the duodenum with numerous calcific shadows within the lumen which apparently was due to a markedly elongated gall bladder filled with calculi, which was probably accountable for the constriction in the duodenum and also in the hepatic flexure of the colon. Urine analysis was essentially normal except for the presence of bile in each specimen. Stool specimens also contained bile. Since admission her temperature has not exceeded 99.4 and her pulse rate has been normal throughout. Cholecystogram shows a slight visualization of a very elongated gall bladder. There are numerous calcific shadows seen within the lumen due to calculi. Slightly more concentration at the fifteen-hour period. The gall bladder does not assimilate the dye very well, possibly due to the filling of the lumen with calculi. Impression: Cholelithiasis.

According to Rich's new classification of jaundices there are only two ways in which jaundice may be brought about: First, by something which obstructs the normal outward flow of the bile (regurgitation jaundice), anywhere from the hepatic epithelial cells lining the bile canaliculi (necrosis), to the papilla of Vater (stones, etc.). Second, excessive destruction of red blood cells with a resultant bilirubinemia, with impaired function of the liver cells (retention jaundice). Under retention jaundice, his first class, the laboratory tests and cause would be as follows: The blood would show a positive indirect Van den Bergh, the stools a positive urobilin and the urine a positive urobilin; the cause being over production of bilirubin and a sub-normal liver function caused by anemia of

various types, chronic passive congestion or a pulmonary consolidation. Under the class of regurgitation jaundice, the laboratory test and cause would be as follows: The blood would show a direct Van den Bergh, the stools would contain decreased urobilin and the urine contain bilirubin and other salts caused by the rupture of canaliculi due either to necrosis of liver cells or obstruction of the bile ducts themselves. Under the classification of regurgitation jaundice caused by obstruction of the bile duct he states that plugging and stricture may be due to several types of foreign bodies or growths or malformations of the ducts themselves, and under pressure extrinsic masses, either parasitic of new growth.

This case evidently would fall in the class of regurgitation jaundice of the obstructive type. There was, however, some question as to whether the calculi shown on the x-ray was entirely the causative factor of her jaundice, owing to the fact that there was a marked pressure impairment on the second portion of the duodenum. The gall bladder, however, had stones present in its lumen and is not visualized, at least only poorly.

Donors are being secured at this time in reserve for repeated transfusions if necessary following her operation, and she will be given one preceding it in hopes of controlling possible hemorrhage following operation and a probable gall bladder drainage will be done in the very near future with removal of the stones that are evidently present within its lumen, as well as the stones in the common duct.

Even though we know that stones are present and are probably the causative factor of her obstructive jaundice, it has not been determined definitely that there is not also a tumor mass of some type present causing the definite obstruction of the second portion of the duodenum, but this will be determined at operation in the very near future.

HEAT EXHAUSTION RESEMBLING A CASE OF ACUTE INTESTINAL OBSTRUCTION

(Dr. Amos)

Mr. W., age forty-three, was admitted to the Robert W. Long Hospital on September 13, 1931, as an emergency intestinal obstruction. Chief complaint on admission was weakness, cramps in the arms, legs and abdomen, persistent vomiting and urinary retention. All were an acute onset. The onset of the present illness dates to two days prior to admission on September 11th, at which time the patient says he became over-heated while at work. His first symptom of vertigo was so severe that he had to quit work for the day and went home. About two hours after the onset of his dizzy spell he became very nauseated, was seized with severe abdominal cramps and started persistent vomiting. Since then he had been unable to keep food down, and his abdominal cramps and vomiting has continued to the present time. Along with his dizzy spell he had a sense of blood rushing to his head and a severe smothering spell.

His past history was essentially negative except for a right inguinal hernia which was repaired at the City Hospital three years ago. The picture on admission was one of extreme toxemia. The patient showed marked dullness, profuse sweating, a rapid weak pulse and rapid shallow respiration. The gums and lips were dry and the tongue coated. There were some rales over both bases, showing an evidence of pulmonary edema. Generalized tenderness was present throughout the entire abdomen and there was a marked right rectus rigidity. The bladder was not especially enlarged, although he gave a history of not having voided in the past thirty-six hours. Rectal examination showed a normal sized prostate.

On admission the urinalysis was essentially normal. The hematology showed a red count of 5,500,000; hemoglobin, 100 percent; and white count, 17,100. There was a 66 percent polynu. neutrophiles; 28 percent lymphocytes; 6 percent L. M. T. There was also some tenderness over both kidney areas.

A tentative diagnosis of heat exhaustion with urinary retention was made. His temperature on admission was 100. He was sent to the ward and an accurate record of intake and output made. Fluids were forced by intravenous and subcutaneous routes for the first twenty-four hours. The temperature gradually declined for the next three days, only to rise again to 103 at which time saline cathartics were started by mouth. After three days of elevated temperature and a marked decrease in pulse rate both became normal again.

N. P. N. on admission was 141 mgms. with a creatinine of 5.6. The following day the N. P. N. had dropped to 80 and creatinine to 1.6. Three days later the N. P. N. was 29 and three days following this it was 33.

Three days after his admission his temperature rose to 103 and he appeared to be very toxic. His abdomen was somewhat more distended. He had not had a bowel movement since admission and enemas were ineffectual. There appeared to be no evidence of mechanical obstruction, but rather the picture of an ileus. On the following day large doses of saline cathartics were started which were very effectual. His temperature began to drop on the sixth day following his admission to the hospital and has remained at about a normal level since. He has been given at least 2,000 cc. of approximately five-percent glucose intravenously daily since admission, and with the fall of his temperature fluids by mouth were started, followed by a soft and general diet. The patient is now ready for discharge from the hospital.

This case will illustrate the decrease in the eliminating functions in general and the marked retention of nitrogenous and other waste materials probably primarily through a decrease in the liver and kidney functions, also the ease with which it may resemble almost any acute surgical abdomen.

Recent reports from the surgeon general's office corroborates the above symptoms and findings in a typical case of heat exhaustion. The fact also is brought out that a marked condition of acidosis resulted which may be secondary or primary to a marked retention of nitrogenous products, as is well illustrated by this case.

THE CLINICAL LABORATORY

In past years the laboratory work of Indiana University hospitals has been done in small laboratories scattered over the campus. On August 17th plans were started whereby all of these laboratories were consolidated into a central laboratory in the basement of the medical school. Equipment was moved and the necessary alterations were made in the rooms now the site of the laboratory. For the most part equipment was utilized which was already University property and a relatively small amount of new equipment was purchased.

The most difficult problems result from the separated locations of the hospitals, and that three separate hospital units are to be served. These difficulties were met by the establishment of a messenger service which collects specimens every one and one-half hours from each hospital from 7:00 a. m. to 7:00 p. m. A system of colored requisitions and reports was utilized wherein each hospital has its individual color; thus the keeping of reports separate is facilitated.

The laboratory does tests of routine nature only upon request of staff members. The tests are run and are reported by the laboratory stenographer. On those wards used for student instruction, the reports are filed and are not accessible to students. The students make tests on the same patients and their results are checked against those of the laboratory. Comparison shows that thus far students are making great effort to do good laboratory work.

The laboratory staff consists of a director, bacteriologist, a serologist, three trained technicians, two student technicians, four student assistants, one stenographer, two messengers and one glass washer.

The laboratory runs daily approximately one hundred fifty urines, twenty-five to thirty complete blood counts, five to ten stool analyses, one to three basal metabolic rates and one to two electrocardiograms. In addition, one hundred sixty serological examinations are run three times per week, as well as many other tests such as spinal fluid tests, gastric analyses, etc.

The laboratory also includes the department of surgical pathology, and is doing a part of that work at present.

The interns are to spend one-half of their time for two months in doing laboratory work.

The laboratory has for its purpose the doing of laboratory work on every patient entering the hospital, to teach students, interns, technicians, and if possible to do research.

SPECIAL ARTICLE

DIPHTHERIA DEATHS IN INDIANA SEPTEMBER, 1931

Four deaths from diphtheria in the state of Indiana for the month of September is a most excellent record. Last year during the same month there were twelve. This makes a total of sixty-eight for the year whereas last year at the same time we had eighty-six, a difference of eighteen—approximately a half of a schoolroomful of children. We are also glad to report that the number of cases being reported this year is consistently under that of last year. Provided the physicians are reporting their cases this should mean that we shall continue to hold the number down and it looks as if there is a splendid possibility of making another new low rate.

The counties which this month are breaking into the black list are Cass, Monroe and St. Joseph, with Henry county reporting one case, which makes its third—a very high rate for a small county. Cases reported for the week of October 10th show us that the focus in the neighborhood of Henry, Delaware and Madison counties continues and that there is still diphtheria in Allen and Lake counties. There is also a significant increase in the number of cases reported in southern Indiana, particularly Vanderburgh, Knox and Lawrence. Southern Indiana has such an excellent record for the past few months that we are very sorry indeed to see the reports from those counties. Particularly gratifying is the fact that whereas we expect the number of deaths to start up in September, the number is actually less than for the month of August. A comparison of various months for the years 1930 and 1931 will be interesting.

	1930	1931
January	18	24
February	19	9
March	6	5
April	7	11
May	4	0
June	3	7
July	7	2
August	11	5
September	12	4
	86	68

County	Total for 1931	September, 1931
Allen	2	0
Bartholomew	1	0
Brown	1	0
Carroll	1	0
Cass	1	1
Clark	2	0
Crawford	2	0
Dearborn	2	0
Delaware	3	0
Fayette	2	0
Franklin	2	0
Gibson	1	0
Grant	2	0
Greene	1	0
Hamilton	1	0
Hendricks	1	0
Henry	3	1
Howard	2	0
Huntington	2	0
Knox	1	0
LaGrange	1	0
Lake	5	0
Laporte	1	0
Lawrence	2	0
Madison	6	0
Marion	2	0
Marshall	1	0
Martin	2	0
Monroe	1	1
Montgomery	1	0
Newton	1	0
Orange	1	0
Perry	2	0
Ripley	3	0
Stark	1	0
St. Joseph	1	1
Sullivan	1	0
Vanderburgh	1	0
Vigo	1	0
Whitley	1	0
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THE JOURNAL
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Devoted to the Interests of the Medical Profession of Indiana
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EDITORIALS

LACRIMAL OBSTRUCTION

Stenosis of the lacrimal ducts, with the development of dacryocystitis and not infrequently acute lacrimal abscesses, is a condition which in the main has not been treated very successfully or satisfactorily except in a small percentage of cases. The old-fashioned treatment consisting of probing, a painful procedure, resulted in some cures; and Ziegler's method of wearing a style, frequently removed for cleansing purposes, until the duct becomes patulous, has been more satisfactory than probing and less painful and objectionable to the patient. Within the last few years much work has been done to perfect an operation the object of which is to provide drainage from the sac directly into the nose. In some operations the approach is externally whereas in others the approach is by the intra-nasal route. The result desired by each of these methods is to secure a large opening from the sac directly into the nasal cavity at the anterior end of the middle turbinate body. A large percentage of cures have been reported by the operators of these various methods. There are, as pointed out by Dean in the *Archives of Ophthalmology* for August, 1930, objections to these operations some of which are as follows: (1) It is not a safe procedure to conduct pus in the lacrimal sac directly into the nares in the region of the ethmoid cells, and especially if some of the anterior cells have been broken down by the operation as usually is done. There also is danger of infection of the maxillary antrum if pus is found in proximity to its opening. (2) There is too much danger that infectious material may be forced from the nares into the eye when there is so short and direct a connecting passage.

Dean recommends a modification of the old probe operation which in brief he describes as follows: After determining that the canaliculi are patulous and the tissues in and about the sac are anesthetized, by the injection method, an incision is made into the sac, the cut extending from the ligament of the orbicularis down to the lower border of the lacrimal groove or about seven millimeters in length. Through the opening in the sac the contents of the sac are washed out and a two percent solution of silver nitrate is used on a swab in order to wipe thoroughly the entire mucous lining. The sac is then packed with a wick dampened with a ten percent solution of cocaine with a drop of epinephrine added. In five or ten minutes the anesthesia is complete, and then probes of varying sizes, beginning with one of two millimeters in diameter, are passed through the duct. A 3.5 millimeter probe can be passed in nearly all cases, and occasionally a larger probe may be used. Sometimes the duct is not large enough to take anything above a 2.5 millimeter probe. After the duct has been dilated a 2.5 millimeter silver drainage tube is introduced and a dressing applied. At intervals of two or three days the sac is treated through the incision and the tube and dressing are replaced. When the sac is cured of infection and the duct is well dilated, the incision in the skin is allowed to close, which it does within two or three days without leaving a visible scar. From four to six visits are required as a rule to complete a cure. The obvious advantage of this method is that the rational way to treat a closed cavity filled with pus is to convert it into an open cavity. Dilation and treatment of the lacrimal duct can be more easily and accurately accomplished when there is no tissue to go through before reaching the sac.

CURING EARLY CANCER

Early cancer can be cured is the dictum of the New York State Department of Health, and the successful result is based upon cases treated five or more years ago when methods were not so well perfected as at present. Even better results are being obtained with the technique now in use. Although the absence of symptoms for five years does not absolutely guarantee a cure of the disease, the percentage of recurrences after that period is comparatively small, and in the cases where there has been freedom from all signs of the disease for a long time as the result of treatment, it may be considered that much has been accomplished. The majority of patients who present themselves at the State Institute for the Study of Malignant Diseases were in an advanced stage of the disease. The statistics for lip, uterus and breast cancer bring out the fact that patients treated in the early stages show markedly the best results. Also, that most of the cases, with the exception of lip cancer, were rather advanced when they appeared for treatment. Lesions on the lip are noticed at once and medical advice is sought usually when cancer is in the early stages. The best results are obtained in the basal cell epithelioma group. This is due to three factors: First, the lesion almost always is confined to the face; second, this type of cancer does not tend to extend to the neighboring structures; and, third, it is very susceptible to treatment. Obviously if all patients were treated in the early stages of the disease the number of cured cases would be greatly augmented. It is

interesting to note that in group 1, consisting of the early cases in which the disease was localized, the cases well five years or longer following treatment were as follows: lip, 65 cases, 72.4 percent cures; uterus, 14 cases, 64.2 percent cured; breast, 60 cases, 66.6 percent cured; tongue, 123 cases, including first, second and third groups, 15 percent cured; all groups of basal cell epithelioma, 199 cases, 73.8 percent cured; mouth, all groups, 69 cases, with 23 percent cured. It is expected as a result of the improved technique used today that the next five years will show a very marked increase in the percentage of cured cases.

MEDICAL ETHICS—"A NOBLE EXPERIMENT"

Recently the American College of Surgeons has sent out a letter, presumably to every Fellow, which reads as follows: "Each Fellow of the American College of Surgeons has signed a pledge one portion of which reads as follows: 'I pledge myself so far as I am able to avoid the sins of selfishness, to shun unwarranted publicity, dishonest penny-seeking and commercialism disgraceful to our profession; to refuse utterly all money trades with consultants, practitioners or others; to teach the patient his financial duty to the physician and to expect the practitioner to obtain his compensation directly from the patient; to make my fees commensurate with the services rendered and with the patient's rights; and to avoid discrediting my associates by taking unwarranted compensation.' On June 7, 1921, the Board of Regents of the College passed the following resolution: "Be It Resolved, that to accept rebates on glasses and other surgical apparatus and supplies is considered unethical and not consistent with Fellowship in the College.' The American College of Surgeons is opposed to the practice of receiving rebates, commissions, or compensation of any kind for reference of patients to diagnostic laboratories, and commends the action taken by the California Medical Association at the meeting of the House of Delegates April 27, 1931, approving the resolution presented by its Council as follows: 'Resolved: That it is the sense of the Council and it is declared as a statement of ethics in that regard, that any physician who is a participating member of a diagnostic laboratory and who receives as compensation from that laboratory a portion of the fees paid by patients he has referred to that laboratory, shall be considered unethical * * * ' Violation of the principles of the College by its Fellows is to be the subject of definite action at the annual meeting of the Board of Regents in October, 1931. We look for the cooperation of every member who is in accord with our ideals."

In the words of President Hoover, "This is a noble experiment," but like prohibition it has failed signally in accomplishing very definite results. We confess that we are in entire sympathy with the principles as laid down, and we have observed very faithfully the principles enunciated, but we have good reason to believe that the American College of Surgeons has not been very strict in enforcing its principles, and in this we are voicing an opinion that we believe is rather prevalent all over the United States. We are satisfied that the American College of Surgeons has done a distinct service in raising the moral tone of a good many surgeons, but we also have every reason to believe that there are many surgeons and other specialists who not only gained admission to the College under false colors but have been sailing under false colors ever since. On the other hand, a goodly number of surgeons did not require Fellowship in the American College of Surgeons to induce or stimulate them to live up to all of the principles and precepts of the College. It has been charged rather openly and we have reason to believe that there are many prominent Fellows of the College who are guilty of commercial practices that presumably have been condoned by the College. They divide fees in one guise or another, and some of them attempt to ease their consciences by telling the patient that they are collecting service charges for the family or referring physician, and they think that gets around the pledge of the College though they know perfectly well that the referring physician, whoever he may be, should charge and collect his own fees for any services rendered. We may be mistaken, but we do not believe that the College has put forth any serious effort to clean house, and to our notion, using a slang phrase, "it is time to either fish or cut bait."

OUR MEDICAL LAW SUSTAINED

(A KNOCK-OUT BLOW FOR THE CULTISTS)

Under date of October 15, 1931, the bulletin to secretaries of the Indiana State Medical Association discusses the developments in laws regulating the practice of medicine and has the following to say: "Within the last week the cultists of Indiana have received two stunning blows in decisions by the Indiana Appellate Court, which upholds the 1927 amendments to the medical statutes and makes the Medical Practice Act of Indiana ironclad. This gives Indiana as perfect a Medical Practice Act as exists in the United States and makes our state outstanding in statutory regulations in regard to the healing art. Albert Stump, attorney for the state association, who wrote the 1927 amendments, has presented the following summary of the findings of the Appellate Court:

"The Medical Practice Act in Indiana was amended in 1927 to give to the courts the power to enjoin the practice of medicine without a license. The same Act provided also, 'That any chiropractor or practitioner of any other system or method of healing who is a graduate of a school or college teaching the system or method which he practices

and who was on January 1, 1927, residing in the State of Indiana and practicing chiropractic or any other system or method shall be given without examination a certificate for a license to practice the system or method of healing in which he has been so engaged'.

"In Indiana State Board of Medical Registration and Examination vs. Herman O. Pickard, Indiana Appellate Court, No. 14306, the Appellate Court, in reversing the late Judge Leathers of the Marion Superior Court, held that the phrase 'is a graduate' has reference to the time when the act took effect, which was on May 16, 1927, and they stated in their opinion the following: 'We hold that as a prerequisite to an applicant being granted a certificate for a license under this Act it is necessary that such applicant present to the Board satisfactory evidence that he was on or before May 16, 1927, a graduate of a school or college teaching a system or method of healing which he was practicing on January 1, 1927'.

"In another recent case, Bryant Ernest Pitzer vs. Indiana State Board of Medical Registration and Examination, Indiana Appellate Court, No. 14363, the question was considered as to whether one had a right under the present medical practice law to take an examination for a certificate for a license to practice medicine if he failed to produce satisfactory evidence that he is a graduate of a school maintaining a standard of medical education as fixed by the State Board of Medical Registration and Examination. The question arose upon the application of Mr. Pitzer to take an examination on the showing that he was a graduate of the Lincoln Chiropractic College. The court held 'that applicant is not entitled to an examination or certificate and license to practice chiropractic until he has satisfied the Indiana State Board of Medical Registration, by presenting evidence, that he is a graduate of a college maintaining a standard of medical education meeting the minimum required as filed by said Board'.

"Under the force of these two decisions one can obtain a license to practice in Indiana by examination only if he is a graduate of a college that maintains a proper standard of medical education; and without an examination only if he was practicing whatever method he seeks by license to use, on January 1, 1927, and was on May 16, 1927, a graduate of a school teaching that method. The minimum required by the board is six years of training beyond the high school. This will apply, under these decisions, to all applicants for examination for a license to practice any form of healing in Indiana."

NECESSITY OF PERSONAL CONTACT WITH LEGISLATORS

Senators and representatives are flooded with petitions, resolutions, letters and telegrams each session of Congress. These come from individuals, or organizations, urging the support or the defeat of various measures and usually are answered in very courteous and non-committal language. The effect of such communications upon shaping legislation is doubtful as congressmen usually get their ideas about voting from other sources. In matters that have to do with medicine, a friendly talk by the right physician often will have more influence upon a congressman's viewpoint than resolutions, communications and briefs from a county medical society, the state organization, the American Medical Association, or the Woman's Auxiliary, no matter how vigorous or sincere these may be. Therefore it is the duty of every physician in Indiana who is a personal friend of any senator or congressman to make an engagement with him and give him the medical profession's ideas concerning such vital questions as the hospitalization of veterans, such paternalistic measures as the Jones-Cooper bill that would revive the Sheppard-Towner Act, proposed anti-vivsection legislation, and other matters of interest to the medical profession. If you desire any information upon these subjects, this may be obtained by writing the headquarters office of the State Association. Every physician who talks to his congressman should be familiar with the insurance plan of benefits for world war veterans as presented by Dr. H. H. Shoulders, of Nashville, Tennessee, as opposed to the plan of spending many millions of dollars for hospitals which after they are constructed will not adequately take care of the situation. Detailed information concerning the Shoulders plan may be obtained from the October Bulletin of the American Medical Association.

The Legislative Committee of the State Association has suggested that physicians get their information together upon medical problems and make it a point to talk as individuals to their senators and congressmen concerning those problems which are likely to be brought up at Washington during the coming session. Resolutions by county medical societies are necessary and personal appeal is imperative. There are physicians who can think right and can talk convincingly in every district who as family physicians, or friends of Indiana congressmen can do more to help shape medical legislation than the State Association can do in passing a thousand resolutions.

NEED OF EXTRA VITAMIN D IN WINTER

The time of year is coming when a large percentage of the days will be cloudy; when we shall cover our bodies with clothing; and when we shall choose to remain indoors a large portion of the time. While it is generally true that the food we eat will furnish all of the essential ingredients needed for health it also is true that we as a species have modified greatly the living habits which the race has developed through ages of evolution. The animal living in a state of nature

is in essentially the same environment for which he has been adjusted by ages of adaptation. If he were not well suited to that particular environment, his species long since would have become extinct. Rickets is quite uncommon in wild animals but is frequently seen in pet dogs which are kept indoors and fed denatured foods. In a state of nature they doubtless would have been spared this serious deficiency disease.

The human child is separated widely from a natural environment. We would not wish it otherwise, since in that case he would be compelled to give up the many benefits of civilization. It is merely that we wish to call attention to the price which we may be asked to pay for the privilege of wearing clothes and living in houses. If the price is understood it is frequently possible to pay it in other ways than by enduring bad health. Vitamin D in the diet replaces the sunlight to which the species has become dependent. Vitamin D may be supplied by the giving of cod liver oil. This preparation which has been the bug-a-boo of the past is now far less objectionable to the taste than in the old days when it was made from putrid livers. Children should be given cod liver oil before they are old enough to have highly developed senses of taste. In such case they usually will learn to like it or at least not mind it much. In case it disturbs them too much Viosterol may be substituted, though it is generally considered that this product is not a full substitute for the cod liver oil. Milk, butter and eggs also are important sources of vitamin D. Fruits and vegetables which have grown in the sunlight are likely to be rich in this essential food ingredient. Recently various foods which have been irradiated are being put on the market. The cereals can be made to take up considerable amounts of the active ingredients if they are exposed to ultra-violet rays. A well-known brand of rolled oats is so treated. Recently in certain cities a loaf of bread has been put out that is supposed to be rich in vitamin D. Many of these products have been passed by the Council on Foods of the A. M. A. and are doubtless quite reliable. Ultra-violet lamps are found in many bath rooms, but should be used with caution and only with a doctor's supervision. All in all it seems that we should be able to struggle along this winter without letting the children get rickets. Furthermore, it would even seem that we might get along without forcing children who detest the taste of cod liver oil to be martyrs to the cause of nutrition. If there were no other reason, we would say that it is better not to get the children to thinking that health is something that comes out of a bottle. But if they need the oil of cod they should have it, and without too much argument.

MEDICAL SERVICE

Since health is the primary concern of every individual, the question of medical service is not infrequently the subject of lively public debate. Usually interest is aroused by the profession itself. Every advance in medical science excites renewed curiosity. The prospect of better health and a longer life fires the public imagination. Thousands seek immediate benefit from the discovery. In recent months both the popular and the medical journals have been engaged in a discussion of the service of the doctor of medicine, the charges he should make, the extent to which he should rely on assistance, and the employment of hospital and clinical facilities.

Addressing the American College of Surgeons at its October congress in New York, James R. Angell, president of Yale, expressed a layman's view that seems to treat the fundamentals of the situation with clarity. After referring to state-controlled medicine, industrial and health insurance methods, co-operative clinics and other plans to bring the ablest medical service within the reach of every citizen, Dr. Angell supported the conclusion that "any plan which lessens responsibility of the competent physician, or denies him the rewards of individual effort and superior ability, will ultimately be detrimental to public welfare". This is in opposition to the suggestions looking toward regimenting, subsidizing and standardizing medical attention under state control.

After setting up restrictions to protect the people against the consequences of deception in medical practice, and providing for the public health, especially in emergencies when the individual is helpless to combat epidemic diseases, the state has done about as much as it should. Its institutions for the treatment of difficulties that cannot be handled on a private basis, and its provision of hospital treatment on a humane scale are, of course, necessary to the public welfare. But to supplant the right of the patient, or his family and friends, to exercise freedom of judgment in a matter of vital consequence, with a formula of treatment devised and provided by the state, is to assume dangerous authority, and certainly to arrest the initiative of the physicians who apply discoveries to problems arising in their practice.—*The Indianapolis News*, October 19, 1931.

THE OPTICIAN'S GRAFT

Within recent years there has been a growing tendency on the part of school boards to employ opticians to examine the eyes of school children, and not only give advice as to the wearing of glasses but actually furnish the glasses at the expense of the parents. Sometimes this practice has had the endorsement of school physicians and even members of the local medical profession, though it is questionable if the possibilities for harm and abuse of the privilege have been taken into consideration. In some of the cities and towns visual tests are conducted by school nurses or school physicians, and when defects are found the

parents are notified and the recommendation made that the child with the defective vision be taken to an eye specialist, the choice being left entirely to the parents. In reality this is the proper way to handle the subject. However, quite recently we have learned that in one small city the school board has employed a rather mediocre optician to examine the eyes of each and every pupil in the public schools of the community, and the examination is a requirement and the finding accepted as the last word, irrespective of the wish of the parents or the presentation of evidence to the effect that the pupil already is under the care of a competent eye specialist. As might be expected, few of the pupils escape the recommendation that glasses be worn, and of course the optician is right on the job with glasses, which the parents are requested to pay for, often at exorbitant prices. In not a few instances pupils regularly under the care of competent medical eye specialists have been told their glasses must be changed, and an effort has been put forth to discredit the work of reputable medical eye specialists. Of far more importance is the fact that no optician, without having had medical training, is in a position to recognize and diagnose pathologic conditions which should require attention, but these school opticians frequently do attempt to diagnose pathologic conditions, and altogether too frequently prescribe certain forms of treatment. It is quite sufficient to condemn the practice of permitting such untrained persons to be the judge as to how our school children are to be handled. That many school pupils with perfectly normal eyes are wearing glasses prescribed by some avaricious optician is proof of the commercialistic tendencies that prevail in such circumstances, for the optician is first, last and nearly always a tradesman, and it is not only his business but his intention to sell goods. The question may be raised as to why reputable medical men tolerate such a practice in their several communities. Why should any school board dictate to parents as to when, where and what shall be prescribed for the physical or pathological disabilities of their children? We do not disapprove of the physical examination of children by medical men, and we do think that there should be a check-up of the vision of all school pupils, but the decision as to where the pupil should be taken for attention should be left to the parents, and they should be told that the most trustworthy service is secured from those who have been specially trained in the treatment and management of eye abnormalities of any kind. To employ a certain optician to make an eye examination in public schools is paramount to giving that optician a recommendation as to ability, and as the optician is a commercialist first, last and all the time, his preferment by any school board savors a little of graft. The system is wrong, and it is time that the medical profession placed its stamp of disapproval upon it. The Woman's Auxiliary of the Indiana State Medical Association could be of signal help in this matter.

EDITORIAL NOTES

It is time to pay your medical society dues. Pay now. Why not start the new year with all members paid up for 1932?

Members of the Indiana State Medical Association are advised that their executive committee has gone on record as favoring the action of the Michigan State Medical Society in refusing to give free medical information to insurance companies.

One of our readers offers a good suggestion to the effect that in these times of depression, physicians ought to stop prescribing so many high-priced pharmaceutical specialties and instead use some of the old, thoroughly tested and trustworthy remedies that are inexpensive because they do not bear the copyrighted or special name of some pharmaceutical manufacturer.

In this number of The Journal we republish an editorial on Medical Service which appeared in the *Indianapolis News* under date of October nineteenth. The executive committee of our Association has considered the article so rational, fair and comprehensive that this occasion is taken to express the appreciation of the medical profession of Indiana to the *News* for its foresight and interest in matters concerning public health and scientific medicine.

Dr. Thurman B. Rice, who contributes the special article on diphtheria each month, calls attention to the report appearing in this issue and points out that if the record can be held down reasonably well for the next three months, we shall make our fourth consecutive low record on diphtheria. According to past experiences it is time for the diphtheria death rate to be turning slightly upward in Indiana. We hope that the "past experience" criterion will be erroneous in this instance.

Again we desire to call the attention of our readers to the inconsistency of tolerating a go-between in the relationship of physician and patient. Some insurance companies are attempting to sell policies to lay persons that provide for medical and surgical attention at a definite rate per year. Such an arrangement can only end in dissatisfaction to patient and physician. For the physician it means wrangling with insurance companies concerning fees to be charged, and questioning the validity of the bills.

PERHAPS it is appropriate to call the attention of physicians to the fact that now is the time to put shoulders to the wheel in an effort to bring about general diphtheria prevention throughout the state. Much very valuable work has been done in Indiana, but there is much more to be done. Only by eternal vigilance and the practice of diphtheria prevention as recommended and carried out by the ablest public health authorities can we hope to keep down the morbidity and mortality from the dreaded diphtheria.

THE retiring chairman of the program committee has issued a formal statement in which he criticizes our plan of securing and arranging programs for the annual sessions of the Association. His criticism is very just and appropriate, for it must be admitted that not enough thought is given to the question of arranging scientific programs that are of interest to all classes of members, and too little time is given to the selection of essayists. The matter should have constructive thought before the next session in order to avoid mistakes of the past.

THERE never has been a time when physicians were more exploited than they are at present. They are swamped with requests to join in all kinds of questionable dealings connected with some phase of so-called health work, and they are asked to endorse a wide variety of worthless or near-worthless remedies and appliances. Every reputable physician should be on his guard if he desires to keep himself free of embarrassing positions. Endorsing anything is bad practice, for it generally leads to the assumption on the part of a great many people that the endorsement has been paid for in some way and therefore is not quite sincere.

THE United States Department of Agriculture, through its extension service, is carrying on an educational program in connection with the slogan, "A well-balanced diet helps to keep people well." Especially recommended is a diet composed of milk, eggs, beef, pork, liver, chicken, or fresh canned or dried fish, and fresh or canned tomatoes. Milk is recommended for daily consumption, and the other items often, and the whole may be supplemented by cheese, eggs, peas, beans, and whole cereals, and some leafy and other vegetables. Physicians are urged to tell their patients in moderate circumstances that the garden, the cow, the pig and the hen provide an ample and well-balanced diet.

THE executive committee of the Indiana State Medical Association recently has received information concerning the activities of a physician in Indiana who makes and administers a medicine which he claims is a cure for a specific disease. His claims arouse fallacious hopes in the hearts of many afflicted individuals who will be harmed by their faith in a quack remedy. In Fort Wayne a physician made unwarranted claims concerning a so-called "diabetes cure" which he made and sold at "so much" per bottle. The censors of the society promptly recommended expulsion of the offending member. As a profession we cannot tolerate such quackery knowingly.

WE always have contended that the members of the pseudo-medical cults are taking a short cut to the regular practice of medicine, and many of them actually are practicing medicine in the fullest acceptation of the term. As an evidence of this, we call attention to the seventh annual convention of the Indiana Naturopathic Association, held at Indianapolis, with one J. A. Pickard, of Indianapolis, scheduled to hold a "tonsil clinic" at which it was reported tonsils were removed by "the electro-coagulation method". Pickard advertises as having a naturopathic hospital. As a mere side issue we note that a dealer in surgical instruments carries an advertisement in the program. Do naturopaths need surgical instruments?

THE executive committee of the Association as well as the editor of THE JOURNAL are receiving numerous inquiries from physicians of Indiana concerning the trustworthiness of insurance companies writing various types of protective insurance. We desire to repeat what we have said before, that neither the Association through its executive offices in Indianapolis, nor the editor of THE JOURNAL, are endorsing or recommending any insurance company. The suggestion is made that those who desire insurance of any kind should investigate before investing, and as a matter of relative safety it is well to place insurance with old, well-established and well-financed companies with proven reputations for fair and conscientious service.

THE Bureau of Publicity of the Indiana State Medical Association is taking up the subject of fee splitting in its various phases as practiced by some of the members of the Association. According to one of the reports of the Bureau considerable evidence has been collected showing that some of our prominent members are guilty of fee-splitting, and the Bureau gives notice to the effect that exposures will be made unless the practice is stopped. May the Bureau succeed in its laudable efforts, and if it does it will do more than ever has been accomplished by the American College of Surgeons, which has made such a hullabaloo about fee-splitting and requires its Fellows to sign a pledge which never has been and never will be worth the paper it is written upon unless some action is taken in penalizing offenders. Publicity will accomplish more than anything else, for if there is anything that a physician dislikes it is being in the limelight as some sort of criminal.

In reporting the proceedings of the last convention of the American College of Surgeons, some of the newspapers credited Dr. Kanavel, of Chicago, president of the College, as having called attention to much crookedness and dishonesty among members of the medical profession, some of whom he called "hi-jackers". Publicity such as that does not help the medical profession, and while it may have been all right for a professional audience there is no reason why it should have been given to the lay press. In fact, it is a question if Dr. Kanavel and many other prominent men who could be mentioned were not "publicity hounds" while they were attending the convention, and we offer this criticism because of the newspaper notoriety procured by some of those who attended the convention. Certainly the College of Surgeons and other similar groups should have a bureau of publicity or some competent committee through which copy for the lay press is censored before publication.

An editorial in the *New England Journal of Medicine* (January 15, 1931) commenting on the Coffey-Humber theory of cancer control not being endorsed, says: "Last winter Drs. W. D. Coffey and J. D. Humber, of San Francisco, claimed to have done work with the extract of the cortex of the adrenal gland which might have useful application in dealing with cancer. Now a report of the use of an extract of the cortex of the suprarenals in treating cancer of mice, by Dr. Itami and McDonald, of the University of Pennsylvania, seems to indicate that this treatment is without value. Thus another hope for the cure of cancer seems to be futile. With the concentration of many minds on the cancer problem the riddle in all probability will be solved, but at present only the established methods of surgery, radium and x-ray seem to hold any hope for the unfortunate victim of this disease. Even with actual progress it is to be hoped that no undue publicity will precede the correct presentation of facts."

From our news clipping service we have received numerous newspaper articles containing eulogistic compliments and praise concerning certain members of the medical profession who recently have been admitted to fellowship in the American College of Surgeons. These newspaper write-ups, accompanied by the photographs of the supposedly lucky physicians, are so extravagant in praise as almost to justify us in thinking that a paid publicity agent was responsible for the advertising. We may complain about the advertising of the quacks, but it is time to turn our attention to the advertising of supposedly reputable medical men who are no better than quacks when it comes down to seeking and securing publicity in the lay press. The whole thing is nauseating and disgusting to the better class of medical men and we often wonder why fellowship in the American College of Surgeons should be sought by any physician who upholds and respects high professional ethics and the better medical ideals.

The editor of the Vanderburgh County Medical Society *Bulletin* says that he is amused to read the editorials in the *Journal of the A. M. A.* and in our own State Medical Journal concerning the menace of state medicine, and recommendations that county medical societies solve the problem by cooperating to furnish medical and surgical services to any and all persons for fees that the patient can pay. In the next breath it is admitted that cooperative medicine in Vanderburgh county was a flat failure, *for the reason that the physicians in that county failed to cooperate.* It is our turn to be amused, for we are inclined to believe that the admission made indicates that the physicians of Vanderburgh county are inclined to "let George do it", and of course if they are not individually and collectively willing to make any effort to help themselves, then they have no one to blame if they suffer from the ills of state medicine, or are wiped off the slate altogether. There is an old saying that "the Lord helps those who help themselves", and if physicians are not going to try to help themselves there is no excuse for whining when they get hurt.

For several years the Indiana State Medical Association has been beating time and floundering in the consideration of the question of presenting postgraduate courses to the medical men of the state. A lot of high-faluting and visionary ideas have been expressed, but no tangible results have come from any suggestions made. The Indiana University School of Medicine has a large number of prominent, capable men who are familiar with teaching, and aside from this there are prominent and well-trained men located in every populous community of the state who can aid in giving postgraduate work. Why doesn't the Association in conjunction with the medical department of the University unite in giving a number of postgraduate courses in the various cities of Indiana? It would be quite appropriate to charge a nominal fee for such courses. Instruction should be of the practical variety and not ultra-technical, for it is the general run of medical men who desire postgraduate instruction and they want something that is practical and suitable for everyday use. Let's quit *talking* about postgraduate work and get busy and *do* something!

The government is becoming very active in prosecuting manufacturers or distributors of medicinal preparations that are falsely or fraudulently represented by a label or circular accompanying the package as a preventive or treatment for disease conditions. In determining whether therapeutic or curative claims are true or false, the administration is guided by the consensus of

current medical and dental opinion as to the effectiveness of the ingredients of the product. Recent surveys have shown many products on the market bearing labeled claims which their compositions do not justify. Notice has been served upon the various manufacturers and distributors to the effect that unless claims are justified in the light of present scientific knowledge the government will proceed to prosecute under the provisions of the food and drugs act. Such a move ought to put out of commission a great many proprietary remedies. It is to be regretted that the government does not have a law making it possible to prosecute quacks and pseudo-medical quacks who make preposterous claims concerning their treatment of various disease conditions. Perhaps that will come later.

THE basal metabolic rate in its relation to thyroid disease is the subject of a discussion presented by Dr. Goethe Link at a staff meeting of the Saint Francis Hospital in Indianapolis, published in the August number of *Medical Arts*. Dr. Link's conclusions were, first, that there are many cases of thyroid disease in which metabolism is not disturbed, or there is little variation from normal; second, that the estimation of the basal metabolism rate in the hands of some technicians is subject to so much error in addition to the normal quotient of error of the muscles, that it is practically useless as a means of differentiating in those cases where we need differentiation between thyroid disease with a moderate disturbance of metabolism and other conditions which resemble thyroid disease. Dr. Link takes a swat at the glib salesman who has made it appear that all you need to make a diagnosis of thyroid disease is to run the patient through the machine and read the answer. He believes that in the hands of the most expert and with the best apparatus there is considerable error, and in some cases a very large error which must be reckoned with.

WE have received a pamphlet on birth control, published by the "Medical Bureau of Information on Birth Control of Chicago" which it is said is being indiscriminately distributed among young girls and women in the stores, in the shops, and on the streets. It is a frank advertisement of a jelly that is said to be a preventive of conception. Full directions and even illustrations are given as to how the preventive is to be used. Very naturally we expected this birth control propaganda finally would reach the stage where quacks and patent medicine manufacturers would be offering their birth prevention lures openly to all desiring to secure legitimate or illegitimate birth control. The whole thing is getting to be a nauseating mess, for it is adding to licentiousness and prostitution. It is demoralizing to the morals of our young people, and as has been stated so frequently by many prominent people, birth control measures are utilized more often by unmarried girls and women than by those who perhaps legitimately have some excuse for preventive measures. Birth control measures should be in the hands of the medical profession and handled with unusual discretion. As it is now, contraceptive measures and birth control information may be obtained by anyone, even the young girl under the age of puberty.

MEMBERS of the Indiana State Medical Association should know that the executive committee has recommended that there be no abridgement of social activities at the annual sessions of the Association, though it is urged that no social function be arranged for a time when it will interfere with the scientific meetings. It also will be of interest to know that the recommendation has been made that the financial burden of providing social entertainment for the visitors shall fall upon the members themselves. It is suggested that the usual smoker or get-together evening meeting be a feature, that due attention be given to golf, and that sessions wind up with a banquet at which noted speakers will be present, and that at each of these functions the individual members will pay their own way. This arrangement, it seems to us, is a very satisfactory solution of a vexing problem, for it places no great hardship upon the individual members, and it does relieve the local medical profession of what heretofore has been a burden from a financial point of view. Furthermore, it is hoped that the program committee will provide something that will be of interest to each and every member of the Association, and that means devoting about half of the time to Section meetings and the other half to general meetings. The scientific exhibit also is growing in importance and favor and will be encouraged in every possible way.

THE Governor's Medical Service Committee has been organized to make a survey of the relationship between township trustees and the medical profession in carrying on poor relief work. It is expected that the committee will work out a plan of equalization and stabilization of medical fees in sick poor relief work. The committee already has gone on record in a public statement to the effect that the medical profession is not bound by ethics in any way to defend any physician or condone any physician in wrongdoing in connection with medical services rendered the indigent poor. It also announces that the care of the indigent sick is a community responsibility and not a private charity of the medical profession. As a matter of information the committee says that the medical profession of Indiana each year has given many millions of dollars' worth of medical care to the indigent sick of Indiana without recompense. The committee recommends that the most equitable

way to care for the indigent sick is for the township trustee to make an agreement with the physicians of the county as a group rather than with an individual physician. Such contracts should give specified fees for medical services, which fees may differ somewhat in various counties but will tend to become standardized as the system is put into practice throughout the state. These contracts will be based upon the assumption that individuals have the right to select their own physicians irrespective of the fact that they may be poor, and thus such individuals will not be forced to receive medical attention from any one specified physician rather than the physician of his own choice.

A man suffering from failing vision in both eyes consulted an optometrist, who told him that the impaired vision was due to beginning cataract. A little later the patient consulted an ophthalmologist, who upon making ophthalmoscopic examination discovered a well-marked nephritic retinitis, and a subsequent general examination disclosed an advanced type of chronic interstitial nephritis. Death followed inside of three months, and the patient offered as his excuse for not consulting a physician that he saw no occasion for going to a doctor if he didn't have any pain or discomfort anywhere. Such an opinion is rather prevalent among some people who are inclined to be self-opinionated. The outcome of the case cited should be an example to those who offer objections to periodic physical examination. It should be pointed out that people have gone blind without a pain of any kind and without any visible evidence of inflammation of the eyes. Some have died of heart disease who never had a pain in their hearts, and both men and women have died of diabetes, Bright's disease, and some types of cancer without having had any pain. Cancer may exist for several years without pain, and if not discovered the chances of benefit from operation, which is curative in so many cases in the early stages, have passed. Tuberculosis may exist for years without any pain. People should be made to understand that some of the most serious affections of human beings start and exist for many years without pain or discomfort. This information should be conveyed to the public by medical men who talk upon medical subjects before various clubs and societies.

The American College of Surgeons, in a very large measure, has failed to live up to its principles and teachings. It is an organization that by self-appointment has attempted to tell us how we shall run our hospitals and how we shall conduct ourselves as individuals in the practice of medicine. Isn't it about time for the American Medical Association, the representative organization of the whole profession, to take a decided stand in advocating and attempting to bring about a better recognition of the principles which every right-thinking medical man should uphold? We have no criticism of the American College of Surgeons for the stand that that organization presumably takes upon questions of importance in maintaining the dignity and ethics of medical men individually and collectively, but we do feel that that organization has rubbed the fur the wrong way for the rank and file of the medical profession in claiming to be so good and yet coming so far from living up to its supposed standards. At the last session of the American College of Surgeons some of the more prominent fellows were the victims, intentionally or otherwise, of the lay press ballyhoo that is fairly nauseating to respectable and modest members of the medical profession. Why in the name of common sense doesn't the College have a publicity agent who will become responsible for everything appearing in the lay press that has to do with the work of the College, or of any Fellow of the College? Why should the hospitals of this country accept the standardization program of the College when it is known that in many instances the standardization is more or less of a farce? Some of the most prominent medical men in the United States who are affiliated with the College are damning the College with faint praise for its lack of systematic and conscientious adherence to the principles for which the College supposedly stands. These men could be a great power for good if they had the nerve to say openly what they really think, and the place to get action is right within the organization.

George B. Lockwood, owner and editor of the *Muncie Evening Press*, evidently is a friend of the medical profession. In his paper, under date of October 15, 1931, he takes occasion to criticize "two of the most celebrated jesters of the English speaking world, George Bernard Shaw and Henry L. Mencken," for their attitude in not only discrediting but vitriolically abusing medical men and the medical profession in general. Shaw calls physicians and surgeons ignoramuses and proves himself a candidate for the ignoramus class by saying that bacteriology is superstition and that methods of preventing infection are simply plays on human credulity. He credits physicians in general as having no honor and no conscience, and he gives no credence to statistics or proven facts such as those established through the suppression and control of yellow fever, smallpox, diphtheria, and other devastating diseases. Mencken says that the practice of medicine is merely a system of quackery and he goes out of his way to lambast every phase of scientific medicine. Sensible and analytical-minded people recognize the fact that both Shaw and Mencken profit by keeping in the limelight, and we doubt if either of those vilifiers really believe what they write. In fact we are inclined to believe that both are hypocritical unless, as some maintain, they are good candidates for the insane asylum. The unfortunate feature of the whole thing is that the two men have worked

themselves into an undeserved prominence, and their writings are read by many people who may not be sufficiently well balanced to recognize the error in the arguments presented. We are pleased to note that Mr. Lockwood has seen fit to point out to the lay public the fallacy and idiotic nonsense preached by both Shaw and Mencken in connection with the accomplishments of scientific medicine. He winds up his editorial comment with the remark that "if anyone wants an explanation of Mencken and Shaw he may find it in the fact that they are the gold-dust twins of the literary circus business".

MANY of the counties of Indiana are wrangling with the question of how to procure and pay for medical and surgical services for the indigent. Lake county has discovered that the whole thing is controlled by politics, and it is rumored that there has been an enormous amount of graft indulged in by not only politicians but by members of the medical profession, and in the final analysis the indigent are getting the worst of the bargain. In Allen county an attempt to have the indigent cared for by the local medical society, and decided upon without a dissenting vote by the society in question, met with failure due to interference on the part of one or two members of the medical profession who desired to monopolize the work. In some other counties of the state the problem has been met very satisfactorily through an agreement of the county medical society to render medical and surgical services to the indigent for reasonable fees to be paid by the county. There can be no question about the inadequacy as well as the incompetency of some of the service that has been rendered to the indigent in some counties, and in very few localities has the matter of rendering medical and surgical services to the indigent been handled in a very satisfactory manner. It strikes us that the first thing to be established is the fact that caring for the indigent of any community is a community obligation and not an obligation that should be thrust upon a few philanthropically inclined physicians. There is no more reason why medical and surgical services should be gratuitous than that food, raiment and shelter should be furnished by individuals gratuitously. Medical men have been and always will be charitable, but generosity in this direction has been imposed upon by individuals and communities alike. Economic conditions finally have brought about the necessity for more business-like arrangements in the conduct of the practice of medicine, and in the care of the indigent and poor medical men should receive compensation in direct proportion to the ability of the recipient to pay for that service. The county pays lawyers, contractors and everyone else regular fees for services rendered, and it is inconsistent and unreasonable to consider that physicians should be on any different basis. We already have referred to the method employed by one county to care for the indigent of the community, and the plan is worthy of serious consideration by every other county in the state. In short, the arrangement consists in an agreement by the local medical society to give all needful care to the indigent of the community at fixed rates, and under such an agreement the medical men of the community are morally obligated to give just as adequate and satisfactory service as is given to private patients. Under the terms of the agreement the indigent are given the advantage of special care when required, and the fees resulting therefrom are turned over to the medical society to be pro-rated or utilized as decided by the society. Such an arrangement makes the county entirely independent, as it also makes the physician independent and possessed of the feeling that when he pays his taxes or contributes to community chests he is rated the same as anyone else and is expected to pay proportionately. It is the only fair and equitable solution of this vexatious problem of caring for the indigent.

DEATH NOTES

J. R. LAZENBY, M.D., died August 17th at the home of his son in Mt. Pleasant.

H. S. GIFFORD, M.D., of Tipton, died September 26th, aged forty-nine years. Dr. Gifford graduated from the State College of Physicians and Surgeons, Indianapolis, in 1907.

J. H. RAVENSCROFT, M.D., of Albion, died October 12th, aged fifty-seven years. Dr. Ravenscroft was a member of the Noble County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Maryland Medical College, Baltimore, in 1902.

FRANK E. SEAL, M.D., of Brookville, died October 20th, aged seventy-two years. Dr. Seal was a graduate of the Eclectic Medical College of Cincinnati in 1882. He was a member of the Fayette-Franklin County Medical Society, the Indiana State Medical Association and the American Medical Association.

THOMAS W. BASINGER, M.D., of Petersburg, died in a Vincennes hospital, October 19th. Dr. Basinger was seventy-seven years of age. He was a member of the Pike County Medical Society, the Indiana State Medical Association and the American Medical Association. In 1880 he graduated from the Kentucky School of Medicine, Louisville.

L. J. BALDWIN, M.D., of Westfield, died October 9th, aged seventy-two years. Dr. Baldwin had been in ill health for some time. He was a grad-

uate of the Medical College of Indiana, Indianapolis, in 1898, and was a member of the Hamilton County Medical Society, the Indiana State Medical Association and the American Medical Association.

John Ernest Rarick, M.D., of Wolcottville, died at a hospital in Garrett, October 28th, aged fifty years. Dr. Rarick had managed a tonsil clinic in Wolcottville for many years. He was a member of the Lagrange County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Fort Wayne Medical College in 1905, and excepting for a few months, had practiced at Wolcottville the entire time since his graduation. He had served as city health officer of Wolcottville and held that position at the time of his death.

NEWS NOTES AND PERSONALS

Dr. J. E. Saunders, of Burket, had one eye badly injured in an automobile accident October 19th.

Dr. Florence Lyon has opened an office in Portland, Indiana, where she will conduct a general practice.

Dr. and Mrs. B. F. Hutchings, of Crawfordsville, celebrated their sixtieth wedding anniversary on October 10th.

Dr. George May, of Madison, and Miss Mildred Ann Schirich, of Louisville, Kentucky, were married October 19th.

Mrs. J. B. Clark, widow of Dr. J. B. Clark, and mother of Dr. Edmund D. Clark, of Indianapolis, died at her home in Economy, October 13th.

Dr. Edwin N. Kime, of Indianapolis, talked before members of the Adams County Medical Society at their meeting in Decatur, October 16th.

At the October 6th meeting of the St. Joseph County Medical Society, Dr. M. D. Wygant, of Mishawaka, presented a paper on "Gynecology".

At the October 8th meeting of the Tippecanoe County Medical Society, Dr. M. H. Fischer, of Cincinnati, presented an address on "Kidney Diseases".

Dr. J. H. Ashabranner, of New Albany, is the author of a volume of short stories, published recently by Dorrance & Company. It is entitled "Out of the Deep".

Judge Frank P. Baker presented the first of a series of three talks on "Crime" before the meeting of the Indianapolis Medical Society at the Athenæum, October 6th.

At the October 13th meeting of the Fort Wayne Medical Society, Dr. Walter Simpson, of Dayton, Ohio, presented a paper on "The Modern Management of the Anemias".

At the October 30th seminar of the Indiana University School of Medicine, papers were presented by Dr. Thurman B. Rice, Dr. J. K. Berman and Dr. Robert M. Moore.

The Northeastern Indiana Academy of Medicine met at the Gawthrop Hotel, Kendallville, October 29th. Dr. Jacob R. Buchbinder, of Chicago, addressed the members.

Dr. Ernest Cooper, of Plainfield, Indiana, is retiring after thirty-three years of practice and desires to have a young physician take his place. For details write to Dr. Cooper.

Dr. Robert M. Moore, of Indianapolis, presented a paper on "Considerations of the Heart in Surgery" at the meeting of the Vanderburgh County Medical Society, October 6th.

The first fall meeting of the Elwood Medical Society was held October 6th in Elwood. Dr. J. H. Stygall, of Indianapolis, addressed the meeting, his subject being "Diseases of the Chest".

The Tri-County Medical Society met at North Vernon, October 7th. "Common Diseases of the Heart" was the subject of an address presented by Dr. Elmer Funkhouser, of Indianapolis.

At the October 13th meeting of the Daviess-Martin County Medical Society, held at Washington, Dr. Marlow Manion, of Indianapolis, presented a paper on "Acute Inflammations of the Ear".

The S. M. A. Corporation, of Cleveland, has announced that November, 1931, marks the tenth anniversary of the introduction of S. M. A. (modified cow's milk) to the medical profession.

The Orange County Medical Society met at West Baden, October 13th. Case reports were presented by Dr. H. L. Miller, M.D., G. C. Colglazier, M.D., J. I. Maris, M.D., and W. E. Fitch, M.D.

Dr. Max Bahr, of Indianapolis, talked on "The Theory of Psychoanalysis and the Psychoanalytical Report of a Case of Hysteria" before the October 8th meeting of the Wayne Union County Medical Society, at Richmond.

DR. A. L. MARSHALL, of Indianapolis, has been named by the county commissioners of Marion county to succeed the late Dr. David Ross as a member of the board of directors of the Marion County Tuberculosis Hospital at Sunnyside.

DR. R. L. COMPTON, of Osgood, Indiana, secretary of the Ripley County Medical Society, has been attending a postgraduate pediatrics course at Washington University, St. Louis, Missouri. The course was held during September and October.

THE United States Civil Service Commission announces open competitive examination for principal physiological chemist, applications for which position must be on file with the Commission at Washington, D. C., not later than December 1, 1931.

ACCORDING to announcements in the press, two Indianapolis physicians were given staff assignments at the Riley Memorial Hospital recently. Dr. Matthew Winters was made chairman of the division of pediatrics, and Dr. Lyman Meiks was made full-time pediatrician for the hospital.

THE U. S. Civil Service Commission announces open competitive examination for senior medical officer, medical officer, and associate medical officer, applications for which positions must be on file with the Commission at Washington, D. C., not later than December 30, 1931.

THE Greene County Medical Society met at the Greene County Freeman Hospital, in Linton, October 15th. Dr. F. A. VanSandt, of Bloomfield, presented a paper entitled "Uterine Hemorrhage". A chicken dinner was served by the nurses of the hospital.

DR. P. R. PIERSON, of New Albany, presented a paper before the October 9th meeting of the Floyd County Medical Society, at New Albany. His subject was "Sequellæ Following Injury in Automobile Accident".

SEVENTY-FIVE members of the St. Joseph County Medical Society were the guests of their Plymouth (Indiana) associates at Plymouth, September 30th. The physicians played golf in the afternoon, and in the evening Dr. R. B. Moore, of Indianapolis, talked on "The Heart in Surgery".

THE Medical Service Committee of the Governor's Relief Commission includes Dr. William H. Kennedy, Indianapolis, chairman; Dr. F. S. Crockett, Lafayette; Dr. O. O. Alexander, Terre Haute; Dr. G. D. Scott, Sullivan; Dr. E. M. Shanklin, Hammond; and Dr. G. J. Geisler, South Bend.

SIXTY physicians, members and guests of the Elkhart County Medical Society held a dinner meeting October 1st at the Hotel Alderman, Goshen. Dr. W. D. Gatch, of Indianapolis, addressed the assemblage, his subject being "Diagnosis and Treatment of Intestinal Obstruction".

AT the October 20th meeting of the Indianapolis Medical Society, held at the Athenæum, Dr. T. D. Rhodes presented a paper on "The Effect of Combined Simultaneous Arsenobenzene Therapy on the Serological Reaction", and Dr. T. B. Noble, Jr., presented a paper on "Cellulitis of the Hand".

THE St. Joseph County Medical Society met at South Bend, October 14th, for a dinner meeting, with members of the dental society as guests of the medical society. Dr. Boyd Gardner, D.D.S., of Rochester, Minnesota, presented a paper on "Relation of Dental Infection to Systemic Disease".

DR. G. W. WASHBURN, of Star City, has resigned as county health commissioner of Pulaski county, for the reason that his health will not permit continuation of the work. Dr. T. E. Carneal, of Winamac, has been appointed to complete Dr. Washburn's term, which does not expire until 1933.

THE October issue of the *Purdue Alumnus* carried an article which paid great tribute to Dr. Samuel Kennedy, of Shelbyville, who graduated from the Purdue School of Pharmacy. The article gives a detailed account of his life and important contributions made to the science of medicine by Dr. Kennedy.

A JOINT meeting of the Clinton County Medical Society, the Clinton County Dental Society and the Clinton County Bar Association was held at Frankfort, October 1st. Dr. Albert Stump, attorney for the Indiana State Medical Association, presented new and interesting legal phases pertaining to the various professions represented.

SEVEN physicians appeared on the program of the Indianapolis Medical Society at its October 13th meeting. Case reports were presented by Dr. F. C. Walker, Dr. William E. Tinney, Dr. H. H. Wheeler, Dr. J. H. Warvel, Dr. Charles E. Thompson, Dr. J. William Wright and Dr. William N. Wishard.

THE Gibson County Medical Society held a meeting at the Methodist Hospital, Princeton, October 12th. Dr. V. A. Funk, of Vincennes, presented a paper on "Pelvic Inflammatory Diseases" and Dr. R. G. Moore, of Vincennes, talked on "Observations in Clinical Diagnosis of Pulmonary Diseases". General discussion followed the presentation of the papers.

The U. S. Civil Service Commission announces open competitive examinations for social worker (psychiatric) and junior social worker, applications for which positions must be on file not later than December 30, 1931. Full information and application blanks may be obtained by writing to the U. S. Civil Service Commission, Washington, D. C.

The general seminar of the Indiana University School of Medicine was held October 2nd. Speakers were Dr. J. H. Greist, Dr. P. J. Fouts, Dr. L. G. Zerfas, Dr. John MacDonald, Dr. R. L. Amos, Dr. Clyde G. Culbertson, Dr. Harold M. Trusler and Dr. Thurman B. Rice. The complete report of the seminar is published in this issue of The Journal as an Original Article.

The Indiana Daily Student, for November 3, 1931, says that the Indiana University Medical center was bequeathed a trust fund that may reach $350,000 through the will of Guilford A. Deitch, Indianapolis attorney and insurance executive, who died recently. According to the will, filed in Indianapolis, relatives will receive the income from the fund during their lives, after which it will go to the University medical school.

The Second District Medical Society met at the Linton Country Club, Linton, September 17th. Dr. Robert M. Moore, of Indianapolis, presented an address on "Some Phases of Heart Disease", and Dr. L. Ray Ellars, of Louisville, Kentucky, talked on "The Surgical Abdomen". A chicken dinner was served at six o'clock. The next meeting of this society will be held at Spencer, Indiana.

Approximately fifty physicians from Michigan City, Laporte and other nearby cities attended the initial fall meeting of the Laporte County Medical Society at the Rumely Hotel in Laporte, October 15th. Dr. Thurman B. Rice, of Indianapolis, addressed the physicians, his subject being "Recent Advances in Bacteriology". Dr. F. V. Martin, of Michigan City, reported a case of bone lesion.

The sixteenth annual clinical session of the American College of Physicians will be held in San Francisco, California, April 4 to 8, 1932. Headquarters will be the Palace Hotel, where general scientific sessions, registration, and exhibits will be held. Following the San Francisco session a post-convention tour will be conducted through Yosemite Valley, Southern California and the Grand Canyon of Arizona.

The Hendricks County Medical Society met October 16th at the home of Dr. Amos Carter, Williams Creek Estate, Indianapolis. Speakers were Thomas Beasley and Murray N. Hadley, both of Indianapolis. The subject for the evening was "Pneumonia", which was thoroughly discussed by the members present. This was a dinner meeting, given through the courtesy of Dr. and Mrs. Carter and Mr. and Mrs. B. D. Spradling.

Dr. J. T. Biggerstaff, of Wabash, has printed a small card bearing his original definition of a baby, as follows: "The prince of wails, an inhabitant of lapland, the morning caller, the noonday crawler, the midnight brawler; the only precious possession that never excites envy; a key that opens the hearts of all, rich and poor alike, in all countries; a stranger with unspeakable cheek that enters the house without a stitch on his back and is received with open arms by everyone."

The Medical Films Division of International 16 mm. Pictures, of New York City, has announced the launching of a program of medical educational films through the medium of "sound" and silent motion pictures. The program will include formation of a central bureau for the release of medical motion pictures and it is hoped to encourage hospitals, medical schools, societies and centers to install equipment so that motion pictures may become a part of medical training.

The November 10th meeting of the Fort Wayne Medical Society was held at the Irene Byron Hospital, and included a dedication of new buildings. The November 17th meeting will consist of clinical case reports by Dr. E. M. Van Buskirk and Dr. M. F. Steele, of Fort Wayne. The November 24th meeting will be held at the Lutheran Hospital in Fort Wayne, and at the meeting December 1st Dr. George S. Bond, of Indianapolis, is scheduled to present a paper on "Heart Murmurs".

At the September 4th meeting of the Hancock County Medical Society, held at Greenfield, Mr. Albert Stump, attorney for the Indiana State Medical Association, talked on "Medical Jurisprudence and Ethics". Dentists, veterinarians, and medical, dental and veterinarian students of the county were guests of the medical society. On October 2nd the Society met at Greenfield, with the dentists of the county as guests. Dr. J. E. Ferrell, of Fortville, presented a paper on "Pharmaco-Dynamics from the Drug Endocrine Aspect".

The U. S. Civil Service Commission announces open competitive examinations for chief nurse (Indian service), head nurse (Indian service), graduate nurse (various services) and graduate nurse, visiting duty (various services), applications for which positions must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than December 30, 1931. Examinations are to fill vacancies throughout the United States. Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience.

THE Lawrence County Medical Society held its regular monthly meeting at the Bedford Country Club, Bedford, Indiana, October 7th. A chicken dinner was served at noon. Dr. Norman R. Byers read a paper entitled "Use of Rectal Ether in Obstetrics". Dr. A. E. Newland followed with a paper on "Use of Sodium Amytal in Obstetrics" which had been prepared by Dr. L. H. Allen. Dr. W. H. McKnight presented a paper on "Use of Twilight Sleep in Obstetrics", and Dr. C. H. Emery concluded the session with a paper on "Use of Ether and Chloroform in Obstetrics".

THREE major professions of Clinton county were represented at a joint meeting of the Clinton County Medical Society, members of the dental profession and members of the Clinton County Bar Association, October 1st, in Frankfort, for which the Medical Society was host. Following a banquet at the Hotel Coulter, the professional men were addressed by Mr. Albert Stump, of Indianapolis, attorney for the Indiana State Medical Association. Dr. Ivan E. Carlyle, of Sedalia, secretary of the Clinton County Medical Society, arranged this joint meeting, and the program for it.

THE meeting of the Delaware-Blackford County Medical Society, held at the Hotel Roberts, Muncie, October 20th, according to the secretary, was a "*re*pote" meeting. Dr. Karl T. Brown reported observations in European clinics; Dr. Howard E. Hill reported the Denver postgraduate course; Dr. E. C. Davis reported interesting points from the meetings of the American Academy of Ophthalmology and Otolaryngology at French Lick; Dr. F. E. Kirshman narrated high spots from the pediatrics of St. Louis; Dr. Ball told of the proceedings of the Central States Pediatric Society, and Dr. E. T. Cure gave the proceedings of the House of Delegates of the Indiana State Medical Association.

THE Seventh District Medical Society held its meeting at the Country Club, Franklin, Indiana, October 27th. Hosts were members of the Johnson County Medical Society. Dr. A. S. Jaeger, of Indianapolis, president of the society, presented a paper on "A New Theory for the Cause of 'Idiopathic Menorrhagia' and the Abortion Habit"; Dr. M. C. Pitkin, of Martinsville, talked on "Agranulocytic Angina"; Dr. J. A. Craig, of Greenwood, discussed problems of general practice; Dr. H. H. Wheeler, of Indianapolis, presented a paper on "Some Problems in Diagnosis and Treatment of Colon and Rectal Conditions"; and Dr. R. N. Harger, of Indianapolis, talked on "Poisons and Poisoners". The honor guest for the meeting was Dr. Irvin Abell, of Louisville, whose subject was "Primary, Multiple, Malignant Growths".

THE forty-sixth semi-annual meeting of the Eleventh Indiana Councilor District Medical Association was held October 15th at Peru, with headquarters at the Eagles' Home. Dr. Louis H. Segar, of Indianapolis, conducted a clinic at the Miami County Hospital in the forenoon. In the afternoon papers were presented by Dr. A. B. Rivers, of Rochester, Minnesota, on "Cause of Hematemesis"; Dr. Louis H. Segar, Indianapolis, on "Recent Advances in Pediatrics"; and Dr. L. B. Rhamy, of Wabash, on "The Present Status of the Treatment of Hay Fever". The evening program consisted of a banquet, followed by an address by Dr. Gilbert Fitzpatrick on the subject of "Cancer", which talk was illustrated by motion pictures. The slogan of the Eleventh District Association is "Ours Is the Best District Society in the State".

ACCORDING to an announcement made recently there are thirty-four hospitals in Indiana on the "fully-approved" list of the American College of Surgeons as the result of having voluntarily accepted all of the maximum standards of operation prescribed by the College. Four hospitals in Indiana are rated as "conditionally approved" by having met the minimum requirements for standardization. The fully approved hospitals are: St. John's Hospital, Anderson; Lake County Tuberculosis Sanatorium, Crown Point; St. Catherine's Hospital, East Chicago; the Protestant Deaconness, St. Mary's, the United States Marine and Walker Hospitals, of Evansville; St. Joseph's Hospital, Fort Wayne; Clinton County Hospital, Frankfort; Illinois Steel Company, Methodist and St. Mary's Mercy Hospital, Gary; St. Margaret's Hospital, Hammond; Lafayette Home, St. Elizabeth's and the Wabash Valley Sanatorium and Hospital, Lafayette; Clinic Hospital and St. Anthony's, Michigan City; St. Joseph's Hospital, Mishawaka; Ball Memorial Hospital, Muncie; Veterans' Administration Hospital, National Military Home, Marion; St. Edward's Hospital, New Albany; Reid Memorial Hospital, Richmond; Epworth and St. Joseph's Hospital, South Bend; Mary Sherman Memorial Hospital, Sullivan; St. Anthony's and Union Hospitals, Terre Haute. Conditionally approved hospitals are the Fort Wayne Lutheran Hospital and Methodist Episcopal Hospital, Fort Wayne; the Clark County Memorial Hospital, Jeffersonville, and the Grant County Hospital, Marion.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Neocinchophen-Abbott Tablets, 7½ grains.

Lederle Laboratories, Inc.:

Diphtheria Toxoid, two 1 cc. syringe packages.

Diphtheria Toxoid, two 1 cc. vial packages.
Diphtheria Toxoid, one syringe package.
Diphtheria Toxoid, one vial package.
Solution Liver Extract Parenteral (Lederle).

E. R. Squibb & Sons:
Diphtheria Toxin for the Schick Test, Ready to Use without Dilution.
Scarlet Fever Streptococcus Toxin-Squibb, six 10 cc. vial packages.
Squibb Liquid Petrolatum with Agar and Phenolphthalein.

INDIANA UNIVERSITY NEWS NOTES

Dr. Lawrence Ginther, who was graduated from the Indiana University School of Dentistry last June, has opened a dental office in the Warren Building at Michigan City.

Miss Minnie Remley, graduate of the Indiana University Training School for Nurses, has accepted a position as public health nurse of Switzerland county. Miss Remley has had graduate work at Smith college.

Dr. Matthew Winters has been named chairman of the division of pediatrics of the James Whitcomb Riley Hospital, Indianapolis, and Dr. Lyman Meiks, also of Indianapolis, has been named full-time pediatrician for the hospital.

Dr. J. L. Fichman, who was graduated from the Indiana University School of Medicine in 1929, has opened an office in Indianapolis, just west of Central on Thirtieth Street. Since his graduation Dr. Fichman was for one year the resident physician and surgeon at St. Joseph's Hospital at Fort Wayne and followed that experience with a general practice of medicine and surgery in that city.

Dr. B. D. Myers, dean of the Indiana University School of Medicine at Bloomington, attended the Ecumenical Conference of the Methodist Church held at Atlanta, Georgia, October 18-25th. Only four delegates from the Indianapolis area are invited to this conference, which is held every ten years and is attended by the world leaders of the Methodist church. Dr. Myers was appointed to attend the conference by Bishop Edgar Blake of the Indianapolis Methodist Church area.

Dr. Edwin N. Kime, director of physical therapeutics in the Indiana University School of Medicine, has been made a member of the medical advisory committee of the Washington National Research Foundation. The foundation, with headquarters in Washington, is carrying on a continuous series of scientific experiments. It is headed by Dr. Sherman L. Davis, former professor of chemistry in the Indiana University School of Dentistry. Other members of the medical advisory committee are Senator Royal S. Copeland, of New York; Dr. E. C. Rosenow, of Rochester, Minnesota; Dr. C. Robinson, Chicago; Dr. C. O. Molander, University of Chicago; Dr. Stanley Griffin, Toledo, Ohio; and Drs. Joseph D. Rogers and W. W. Eldridge, Washington.

The Indiana University chapter of the Phi Beta Pi national professional medical fraternity has announced the pledging of the following students in the I. U. medical school: Albert Stouder, Andrews; James Crawford, Indianapolis; Robert Kinzel, Indianapolis; Frank Fink, Indianapolis; Russell Denzler, Jeffersonville; W. A. Nelson, Gary; Charles Swain, Greenfield; Howard E. Sweet, Richmond; Charles Moehlenkamp, Evansville; Lewis Robbins, Indianapolis; Edmond Gross, Logansport; F. P. Jones, Indianapolis; Robert Currie, Windfall; Dahlgren Casey, Austin; Ford Keppen, Michigan City; Richard Stover, Deland, Florida; John E. Fisher, Worthington; Elvin Fitzsimmons, Evansville; Homer Shoup, Sharpsville; Henry Brocksmith, Freelandville; and Lowell Beggs, Scottsburg.

The officers of the fraternity for this year are Warren Morris, Aurora, president; Loren Ake, Cincinnati, Ohio, vice-president; and Wayne Elsten, Lapel, secretary-treasurer.

A popular lecture course on recent developments in medical science intended for laymen who wish to gain an idea of some of the essential facts in medical practice and investigation today is being conducted by the Indianapolis center of the Indiana University extension division. The lectures are being given by members of the Indiana University School of Medicine faculty. The first of the series came on October 6th. The series will consist of eleven lectures and will end December 15th.

The schedule is as follows: October 6th, Dr. B. D. Myers, speaking on "Social Responsibilities of the Medical Profession"; October 13th, Dr. E. V. Hahn, "General Aspects of Cancer"; October 20th, Dr. Hahn, "Cancer—Research"; October 27th, Dr. J. O. Ritchey, "Foods and Vitamins"; November 3rd, Dr. L. G. Zerfas, "Anemia"; November 10th, Dr. E. N. Kime, "Light, Heat, and Exercise"; November 17th, Dr. J. A. Green, "Endocrine Disease"; November 24th, Dr. Alfred Henry, "Respiratory Diseases"; December 1st, Dr. R. N. Harger, "Poisons and Poisoners"; December 8th, Dr. T. B. Rice, "Recent Bacteriology"; December 15th, Dr. G. S. Bond, "The Heart".

While the series is planned to cover some of the subjects of most universal interest from a practical standpoint, it is offered primarily for its general cultural and informative value. The lectures are being given each Tuesday evening at 8 o'clock in the Indiana University Extension Center Building, 122 East Michigan Street, Indianapolis.

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

August 25, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held August 4th read and approved.

Newspaper release, August 25th—"Teeth Ready for School". This, the first dental release, was approved by the Bureau.

Newspaper release on "Infantile Paralysis" referred by the Bureau to several internists for review before final passage by the Bureau.

Radio releases:

August 8—"Iced Drinks in Hot Weather."
August 15—"Typhoid and Paratyphoid Vaccination."
August 22—"Preparation of Children for School."

Request for speaker:

September 14—Randolph County Medical Society, Winchester, Indiana. Speaker obtained to talk on "Diagnosis and Significance of Heart Sounds."

Report on medical meeting:

August 12—Newcastle Rotary Club, Newcastle, Indiana. "The Business Man and His Heart."

The following letter was received from *Science Service:*

"Thank you for your letter of July 27. We will be very glad to receive your bulletins, and agree with you that the weekly newspaper releases might be most helpful. Would appreciate very much your putting the name of *Science Service* on your mailing list to receive these. If, later on, you print a membership list we should be glad to have a copy of this also."

Card received from Mrs. David Ross and son acknowledging tribute paid by the Bureau of Publicity on behalf of the State Medical Association to the late Dr. Ross.

The following bills were approved for payment:

The Bailey Office Supply	$15.00
A. B. Dick Company	2.50
	$17.50

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole September 1, 1931.

October 8, 1931.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held August 25th read and approved.

Newspaper release, October 10th (dental release)—"Does the Chin Betray Character or Is It a Dental Defect?"—read and approved.

Newspaper release, October 17th, "Your School Child's Health," which embodies the health program of the Parent-Teacher Association, read and approved.

September newspaper releases:

Sept. 5—"Infantile Paralysis."
Sept. 12—Annual Meeting of American Academy of Ophthalmology and Otolaryngology.
Sept. 13—Annual Meeting of American Academy of Ophthalmology and Otolaryngology.
Sept. 14—Annual Meeting of American Academy of Ophthalmology and Otolaryngology.
Sept. 17—Annual Session of Indiana State Medical Assn.
Sept. 18—Annual Session of Indiana State Medical Assn.
Sept. 20—Annual Session of Indiana State Medical Assn.
Sept. 24—Annual Session of Indiana State Medical Assn.

Radio releases:

Aug. 29—"Teeth Ready for School."
Sept. 5—"Infantile Paralysis."
Sept. 12—"Superstitions About Health."
Sept. 19—"Eye Strain."
Oct. 3—"Does the Chin Betray Character or Is It a Dental Defect?"

Requests for speakers:

Oct. 16—Adams County Medical Society, Decatur, Ind. Members of the Jay County Medical Society to be invited. Speaker obtained. Subject: "Common Skin Diseases."
November—Kiwanis Club, Richmond, Ind. Porter County Medical Society desires a speaker.

Speakers obtained through Bureau in September:

Sept. 4—Hancock County Medical Society, Greenfield, Ind. Dentists and medical students in Hancock county were invited. "Medical Jurisprudence and Ethics."
Sept. 14—Randolph County Medical Society, Randolph County Hospital, Winchester, Ind. "Diagnosis and Significance of Heart Sounds."
Sept. 15—Rotary Club, Vincennes, Ind. "The Business Man's Heart."

Reports on medical meetings:

Sept. 4—Hancock County Medical Society, Greenfield, Ind. "Medical Jurisprudence and Ethics."
Oct. 1—Joint meeting of Clinton County Medical Society, Clinton County Dental Society and Clinton County Bar Association, Frankfort, Ind. "The Legal Aspects of the Legal, Dental and Medical Professions."

The annual report of the Bureau of Publicity was accepted by the House of Delegates. The Reference Committee on Publicity of the House of Delegates, to which the Bureau's report was submitted, commented as follows upon the report:

"The excellent and detailed report of the Bureau of Publicity gives fully the work which this committee is doing. It is quite evident that this committee has a definite perspective and is attaining that end.

"Through its work it not only is molding the public mind toward a better feeling for our profession but is also making headway in correcting the faults that are to be found in our profession.

"We believe that there is no work more needed at this time than the work of this Bureau, and ask the unanimous acceptance of our report which unreservedly commends the work of the Bureau of Publicity.

"We wish to pay special tribute to the untiring efforts of its members, especially to that beloved physician and surgeon, William N. Wishard, who by his many years of devoted service and his high ideals of practice is a paragon for all physicians and shall enshrine his lasting memory in the hearts of all who knew him for generations to come."

The following letter was received from Mrs. Edna Hatfield Edmondson, executive secretary of the Indiana Congress of Parents and Teachers, suggesting a program for releases:

"We shall be very happy indeed to receive again the releases for our parent-teachers' Bulletin. The first Bulletin is to leave our office the last day of this month. If you have any releases on hand, we shall be very glad to send them out.

"I am wondering if it would be possible for your bureau to time its releases, or rather the subjects of the releases, according to a plan which we have adopted for sending out some suggestions to parents for the consideration of definite health subjects for each month's program. We are sending out these suggestions in cooperation with the Indiana Tuberculosis Association. If it would be

possible for your organization to send us releases on the subjects included in these monthly suggestions to parent-teacher associations, that would tie the whole thing up, and would strengthen each suggestion. It is too late now, perhaps, to follow this plan for the October Bulletin, but beginning with November the following subjects are to be suggested by months:

Nov.—Physical Examination; Immunization (particularly in relation to smallpox and diphtheria).
Dec.—Colds; Lighting and Ventilation.
Jan.—Fruits and Vegetables; School Lunch.
Feb.—Posture; Mental Hygiene; Sleep.
Mar.—Teeth and Milk.
Apr.—Play Out-of-Doors; Leisure Time Activity.
May—Preparation for Health, Happy Vacation for All; Safety.
June—Summer Round-up; Correction of Physical Defects.

"The foregoing are for elementary groups. For high schools, the subjects are:

Nov.—Physical Examination; Immunization; Facts About Tuberculosis.
Dec.—Lighting; Ventilation; Colds.
Jan.—Vegetables and Fruits; School Lunch.
Feb.—Posture; Mental Hygiene.
Mar.—Dental Hygiene.
Apr.—Leisure Time Activity; Safety.

"The articles from the Medical Association would furnish some definite material on these special subjects for the local parent-teacher associations."

The Bureau expressed its appreciation for this suggestion and instructed the secretary to prepare releases in accordance with the above schedule.

A letter was received from the general chairman of the 1931 Scientific Program Committee, making suggestions as to how the state medical society scientific program can be made better. The Bureau instructed the secretary to send a copy of this letter to the editor of THE JOURNAL for his consideration and if he thinks well of these suggestions, perhaps an editorial discussing them might be written.

Request received from International News Service to be placed upon the mailing list for Bureau releases.

Clipping from September 19 *Literary Digest* brought to attention of the Bureau in regard to dental subject. This was referred to the Dental Health Council of the Indiana State Dental Association, which corresponds to the Bureau of Publicity of the Indiana State Medical Association.

The following letter was received from an officer of the Lake County Medical Society:

"The Lake County Medical Society, through its Committee on Publicity, wishes to secure all available information and help possible in putting on an active campaign of publicity. In doing this we are anxious to follow the lines adopted by the State Association in the matter of newspaper releases, radio talks, and the supplying of speakers for parent-teachers, women's clubs, noonday lunch clubs, etc., and in general the spreading of information and education along medical lines.

"We would therefore appreciate it very much if you would send us through the Bureau of Publicity any material which you have suitable for this purpose.

"We realize that this may be an inconvenient time, inasmuch as the state meeting is so close. However, we will appreciate hearing from you at your earliest convenience."

The secretary was instructed to answer this letter offering the aid of the Bureau of Publicity.

Notice was brought to the attention of the Bureau of the ruling of the Indiana Appellate Court reversing the decision of the Marion county superior court which had mandated the Indiana State Board of Medical Registration and Examination to issue a license to Herman O. Pickard to practice electro-therapeutics. This decision of the appellate court upholds the medical construction of the 1927 amendment to the Medical Practice Act and means that no cultist who was not a graduate of a school previous to 1927 is eligible to receive a license before the State Board without examination. Under the law all schools of medicine must take the same examination in the basic sciences, which means that the cultist must be prepared to pass the same examination as the medical student.

Following are excerpts from letters of appreciation received from officers of the American Academy of Ophthalmology and Otolaryngology for the work of the Publicity Bureau during the annual meeting of this organization last month at French Lick:

"I wish to express my sincere appreciation of your keen interest and efficient cooperation in making the meeting of our Academy at French Lick the outstanding success it was.

"I assure you it was a great pleasure to be associated with you those few days more intimately than had formerly been possible, and to absorb from you some of the enthusiasm you display for the cause in which you are engaged.

"JOHN F. BARNHILL,
"Miami Beach, Fla. President."

"It was a pleasure to meet you in French Lick and I am sorry not to have had the opportunity of seeing more of you. I was very much interested in the way you reported on the proceedings of the meeting, and thank you for your courtesy in letting me have a copy.

New York City. "CONRAD BERENS, M.D."

"I am sincere in stating that the press service at French Lick was the most satisfactory we have yet received.

"W. P. WHERRY, M.D.,
Omaha, Neb. Executive Secretary-Treasurer."

"Thank you very much for the clipping and for your kind letter about the meeting. It was a great pleasure to find someone like yourself at the helm of the Indiana Medical Association. We in Oregon may be asking you for some help on some of our problems in State Medicine before long.

"RALPH A. FENTON, M.D.

Portland, Ore. Member of the Council."

The following bills were approved for payment:

Kautz Stationery Company	$ 1.50
Central Press Clipping Service	5.00
Central Press Clipping Service	9.51
A. B. Dick Company	3.85
	$19.86

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 13, 1931.

October 13, 1931.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; James H. Stygall, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 8th read and approved.

Newspaper release for October 24th, "Avoid a Health Depression," read and approved.

Radio release, Saturday, October 10th—"Your School Child's Health."

Request for speaker:

October 27—Porter County Medical Society, Valparaiso. Letter to be written asking for more specific information in regard to type of speaker and talk desired.

Reports on medical meetings:

September 14—Randolph County Medical Society, Winchester. "Diagnosis and Significance of Heart Sounds."

September 15—Rotary Club, Vincennes. "The Business Man's Heart."

The following questionnaire in regard to the scientific program, to be sent to all secretaries of state societies, was presented to the Bureau:

QUESTIONNAIRE ON SCIENTIFIC PROGRAM

1. Name of society
2. How many days is your annual session?
3. Number of scientific papers at annual session
4. How large a proportion of your program is occupied by your own members?
5. How many out-of-state guest speakers do you usually have?
6. Do you have postgraduate courses, clinics or instructional courses at your annual session? If so, do you charge a fee for attending these?
7. Will you please send us a copy of the program of your last meeting?

Signature

The following letter is to accompany this questionnaire:

"In order to get an idea concerning the scientific programs presented at the annual meetings of the various state societies, the Bureau of Publicity of the Indiana State Medical Association desires rather definite information and hence we are asking you to help us out by answering the enclosed questionnaire."

The following letter was received from the chairman of the Dental Health Council of the Indiana State Dental Association in regard to the release entitled "Your School Child's Health" to be sent to the papers within the next few days:

"I am returning herewith the letter from Mrs. Edmondson. Will you please phone me advice as to sending our previous releases to her at this time?

"The inclusion of the Dental Health Council in your statements meets with our entire approval."

The following letter was received by the Bureau from the American College of Surgeons:

"Each Fellow of the American College of Surgeons has signed a pledge one portion of which reads as follows:

"'I pledge myself, so far as I am able, to avoid the sins of selfishness; to shun unwarranted publicity, dishonest money-seeking, and commercialism as disgraceful to our profession; to refuse utterly all money trades with consultants, practitioners or others; to teach the patient his financial duty to the physician and to expect the practitioner to obtain his compensation directly from the patient; to make my fees commensurate with the service rendered and with the patient's rights; and to avoid discrediting my associates by taking unwarranted compensation.'

"On June 7, 1921, the Board of Regents of the College passed the following resolution:

"*'BE IT RESOLVED, That to accept rebates on glasses and other surgical apparatus and supplies is considered unethical and not consistent with Fellowship in the College.'*

"The American College of Surgeons is opposed to the practice of receiving rebates, commissions, or compensation of any kind for reference of patients to diagnostic laboratories, and commends the action taken by the California Medical Association at the meeting of the House of Delegates April 27, 1931, approving the resolution presented by its Council as follows:

"'RESOLVED: That it is the sense of the Council and it is declared as a statement of ethics in that regard, that any physician who is a participating member of a diagnostic laboratory, and who receives as compensation from that laboratory a portion of the fees paid by patients he has referred to that laboratory, shall be considered unethical * * * '

"Violation of the principles of the College by its Fellows is to be the subject of definite action at the annual meeting of the Board of Regents in October, 1931.

"We look for the cooperation of every member who is in accord with our ideals."

Letter received from the National Institute of Health given to a member of the Bureau for review and presentation at next meeting of the Bureau.

A newspaper article with the headlines reading "War on 'Medical Hijackers' Urged as Surgeons Hear Plea to Cut Bills," which appeared in the *Indianapolis Star* on October 13, 1931, by the Associated Press, brought to the attention of the Bureau of Publicity. In this article the incoming president of the American College of Surgeons is reported to have made certain remarks in regard to the commercial difficulties of the medical profession. The Bureau of Publicity issued the following statement in regard to these remarks, a copy of which was to be sent, along with the clipping referred to, to the American College of Surgeons:

"The report of the address, as given in the newspapers yesterday, before the American College of Surgeons in New York City by the incoming president, has been considered by the Bureau of Publicity of the Indiana State Medical Association. The Bureau noted nothing new in the analysis of the commercial difficulties involving the medical profession and regretted that while appealing for medical statesmanship in coping with the profession's problems, there was offered no well-considered solution. The Bureau is inclined to think that such addresses convey an erroneous conception of the attitude of the medical profession as a body in regard to its business problems. The Bureau also believes that such addresses should be carefully digested before delivery, and it might be wise to have them given the consideration of a competent committee. The Bureau's views are based on the published excerpts of the address."

Newspaper article in regard to the alleged irregularities in claims made by physicians of certain counties doing poor relief work brought to the attention of the Bureau.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 21, 1931.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, OCTOBER, 1931

The current prevalence of the principal communicable diseases from all sources show a marked increase, except smallpox. There were 1,363 cases of diseases reported from eighty counties. Five counties did not report, either positive or negative; namely, Newton, Perry, Pike, Posey and Wabash. Six hundred fifty-three negative cards were sent in.

Smallpox. The incidence of smallpox is the lowest for a number of years. Thirty-one cases this month and the same number of cases the previous month. The corresponding month the preceding year seventy-six cases were reported. The disease has shown a low level in September and October for a number of years. Cases estimated expectancy for the two months was sixty-seven and forty-nine cases, respectively.

Diphtheria. Diphtheria shows the greatest increase of any other disease reported. This is true over several sections of the country, according to the current reports of the United States Public Health. Two hundred seventy cases during the month. Fifty-six cases the previous month. However, 201 cases were reported the corresponding month last year. The case estimate for the seven-year period is 313 cases.

Scarlet Fever. Two hundred ninety-three cases of scarlet fever this month. Compared with the previous month, the incidence was 38 per cent increase. The preceding year same month 336 cases were reported. The disease will increase as the cold weather comes on, if the record of former years prevails.

Typhoid Fever. A slight increase is noted in typhoid fever. Seventy-one cases this month and sixty-six cases the previous month. These cases were scattered over twenty-nine counties. The greatest number of cases reported in any one county was Scott where eight cases were found. Other counties reporting several cases:

Noble, seven; Jackson, six; Bartholomew and Cass, 5 cases each. The disease is due for a decline. A low level is usually maintained during the cold winter months, because carriers do not go about spreading their infection so much during cold weather.

Poliomyelitis. There were nineteen cases of poliomyelitis this month, twelve cases the previous month and fifty-five cases the corresponding month last year. The epidemic of the disease that has been prevailing in Northeastern and Middle Atlantic States is subsiding. There never has been a time this year that an epidemic of poliomyelitis has threatened any part of Indiana. There is a low prevalence of the disease during the winter months.

Meningococcus Meningitis. The incidence of *meningococcus meningitis* is at a lower level than the two previous years, although there is an increase of six cases over the previous month. Eleven cases this month and five cases last month. There were sixteen cases in October the preceding year and following this the severe epidemic of 1930. No doubt, there are carriers of the disease. So, let this be a warning to the public.

The name and number of diseases not mentioned above that were reported the current month are as follows: Tuberculosis, 198; chickenpox, 120; measles, 77; whooping cough, 95; influenza, 15; pneumonia, 6; mumps, 44; undulant fever, 8; tularemia, 1 and impetigo contagiosa, 104 cases.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

INDIANA VENEREAL DISEASE CLINICS

Number of cases never previously admitted	335
Total number of old cases and readmissions under treatment during month	5,408
Number of cases discharged as arrested or cured during month	128
Number of cases discontinued treatment without permission	374
Total number of cases remaining under treatment during month	5,241
Number of male syphilitic cases remaining under treatment during month	2,385
Number of female syphilitic cases remaining under treatment during month	1,623
Total number of syphilitic cases remaining under treatment during month	4,008
Total number of treatments during month	11,882
Total number of visits to clinic for treatment, examination or advice	12,569

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	185
Gonorrhea	222
Chancroid	3

During the month four hundred ninety-one pamphlets were distributed. Three hundred fifty-nine were mailed upon receipt of seventeen requests and one hundred thirty-two were sent to six people on our own initiative.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

MINUTES OF THE MEETING HELD AT INDIANAPOLIS, SEPTEMBER 24, 1931

The Woman's Auxiliary to the State Medical Association held a breakfast session at Indianapolis, September 24, 1931. Mrs. William N. Wishard, of Indianapolis, gave the invocation. The president, Mrs. Tomlin, of Indianapolis, gave an address of welcome. The reports of the secretary and treasurer were read and approved. The resignation of Mrs. A. C. Clauser, of Delphi, president-elect, was read and accepted with regrets.

The following nominating committee was named by the chair: Mrs. J. T. Wheeler (chairman), Mrs. Davidson, Mrs. Weinstein, Mrs. Trent and Mrs. Graham. The committee presented the following slate: Mrs. L. E. Fritsch, president; Mrs. O. O. Alexander, president-elect; Mrs. J. C. Armington, secretary, and Mrs. C. F. Voyles, treasurer. The slate was unanimously accepted. A bill of $75.00 for the year book was granted. Mrs. Frank Cregor, of Indianapolis, director on the National Board, gave the report of the National Convention, a broadening of the work in all states as a better understanding of possibilities develop. The report was very interesting. Indiana reports 367 paid members doing social, educational, and philanthropic work. Mrs. W. E. Tinney, counselor for the Woman's Auxiliary, expressed thanks from the medical society for the efficient work done by them during the last legislative session. Mrs. D. O. Kearby wants more articles for publication from Indiana auxiliaries. Mrs. J. C. Carter reported thirty subscriptions to *Hygeia* from Indiana. The following county reports were read:

Marion county, membership of 107 members; Lawrence county, 19 members, 5 meetings; Ripley county, 10 members; Vigo county, 85 members with 8 meetings; Madison county, 18 members with 6 meetings a year; Vanderburgh county, 45 members with 8 meetings; Delaware county, 54 members. Ripley and Lawrence counties are new counties who have joined us this year, 12 members at large.

The speaker for the morning was Dr. Miles Porter, Sr., of Fort Wayne, who gave an interesting message to the Auxiliary, calling them the helping hand society and urging them to see that due consideration be given the medical men for their marvelous work of saving life. He brought to mind the Wright law dealing with the giving of morphine to patients, urging the Auxiliary to educate themselves and their community to know enough about medicine to stop the death rate in the country.

A rising vote of thanks was given to Mrs. Clevenger for the beautiful garden party enjoyed by the members the previous afternoon; also a rising vote of thanks was given Mrs. Tomlin in appreciation of her splendid work as president of the State Auxiliary.

The motion was made to adjourn.

Respectfully submitted,
MARGARET G. FREED,
Secretary.

WOMAN'S AUXILIARY TO THE VIGO COUNTY MEDICAL SOCIETY

The Auxiliary to the Vigo County Medical Society held its fall meeting at the home of Mrs. J. H. Weinstein, Terre Haute. Luncheon was served. Guests of honor included Mrs. W. S. Tomlin, of Indianapolis, state president, and Mrs. F. W. Cregor, of Indianapolis, a director of the National Committee.

THE LAKE COUNTY MEDICAL SOCIETY

The Lake County Medical Society met in regular session at Gary Methodist Hospital, Thursday, October 8, 1931, with President Lauer presiding. The minutes of the September meeting were read and approved.

Application of Dr. Neal Davis, Lowell, read and referred to the Council. Ballot was had on the applications of Drs. Henry W. Eggers, Hammond, and Geo. J. Anthoulis, Gary. The ballot being favorable, both applicants were declared duly elected.

Dr. Forster, chairman of the newly formed Publicity Committee, presented a preliminary report, outlining some of the proposed activities of his committee. They are arranging a list of all the various clubs and organizations in the county that might be interested in talks pertaining to the various phases of medicine, and are listing all members who are willing to give of their time for such work. All such publicity is to be announced as coming from the Lake County Medical Society, thus giving it an official air. On motion the report was accepted, the committee continued indefinitely, they to have full charge of all matters pertaining to publicity, the expense to be borne by the society.

The scientific program was presented by Dr. M. Herbert Barker, Chicago, who discussed "The Management of Chronic Nephritis". Dr. Barker gave a very interesting discussion of the subject, generously illustrated with graphic charts, these giving a detailed history of the progress of various patients under his care. Members were very generous in their questions, following his presentation.

Dr. A. G. Miller, Hobart, gave a brief resume of the work he and his associates are doing with the Ascheim-Zondek test for pregnancy, they having used the test in more than one hundred cases. Dr. Miller is very enthusiastic over the results he has had in this work and believes the test to be one hundred percent correct.

Nominations for officers for 1932 were announced by the chair, the following names submitted for the annual election in December:

President-elect, E. S. Jones, Hammond.

Secretary-Treasurer, E. M. Shanklin, Hammond.

Council (two to be elected), F. A. Malmstone, Griffith; G. S. Greene, Gary.

Council, two years (to succeed Dr. Page), W. D. Wesi, Hammond.

Delegates (four to be elected)—T. W. Oberlin, Hammond; C. M. Jones, Whiting; P. Q. Rowe, Hammond; E. L. Schaible, Gary.

Alternates (four to be elected)—S. D. Taylor, Gary; B. B. Reeve, Whiting; H. J. White, Hammond; H. C. Parker, Gary; A. H. Farley, Crown Point.

Adjourned.

E. M. SHANKLIN,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The first fall meeting of the St. Joseph County Medical Society was held at the Plymouth Country Club, on Pretty Lake, September 30, 1931. The members of the society were the guests of the Plymouth physicians. The afternoon was spent in golf, with a dinner meeting at 6:30 p. m. About eighty members and guests were present.

The paper of the evening, "Heart in Surgery," was given by Dr. R. M. Moore, member of the staff of the medical school of the University of Indiana. Dr. Moore stressed the necessity for a thorough examination of the heart by the internist, and his approval, before surgical intervention. He cited a number of cases in which fatalities had occurred which could have been prevented by a proper knowledge of the condition of the heart. He pointed out when it was safe to operate and when not, from the standpoint of the heart.

Dr. Moore, in closing, answered a number of questions asked by the members.

The St. Joseph County Medical Society met in the Public Library, Tuesday, October 6, 1931, with President Lyon in the chair.

The chairman of the Public Relations Committee made the following report, which is here briefly outlined:

That the welfare agencies are requesting advice and counsel from the profession through the Public Relations Committee of the society; that the society has official recognition by the Federation of Social Service; that four members of the society, Drs. D. A. Bickel, R. L. Sensenich, G. J. Geisler, and M. K. Miller have been appointed on committees to represent the medical society; that the Visiting Nurses' Association is cooperating with the society, requesting the medical society to furnish it with necessary investigation data; that Miss Alice Waldo has been procured as director of the Central Service Bureau; that Miss Waldo has, as her committee, Rabbi W. M. Stern, president of federation, as chairman; Dr. M. K. Miller, Miss Miriam Moore, of Children's Dispensary; Mrs. Lenn J. Oare, of the Visiting Nurses' Association; Mr. J. Z. Nebbergall, of Y. M. C. A.; Mr. Richard Breed, of the Executive Committee of the Federation; and Dr. G. J. Geisler, of the Public Relations Committee; that standardized and uniform records of investigation of indigent cases are in the process of completion.

The committee recommends:

That a twenty-four-hour medical service be established at the Physicians and Surgeons' Exchange;

That the society provide a list of physicians to do the indigent work;

That several physicians be on call for two-week periods, insuring adequate care for the indigent sick.

The paper of the evening, "A Discussion of Menstruation," was given by Dr. M. D. Wygant, of Mishawaka. Dr. Wygant said:

"The physiological cycle that ends in menstruation is explained on the basis of recent work in endocrinology. The function of reproduction is secondary to the body in general.

"Many hysterical and mental symptoms will not be explained until proper study of the psychic life is made."

The paper was discussed by Drs. Sensenich, Faltin, and Bickel.

The regular dinner meeting of the St. Joseph County Medical Society was held in the Oliver Hotel, October 14, 1931, at 6:30 p. m. President Lyon presided.

The members of the dental society were guests of the medical society. There were 140 members and guests present. The speaker of the evening, Boyd Gardner, D.D.S., head of department of oral surgery, Mayo Clinic, was introduced by Dr. Scandling, president of the dental society.

Dr. Gardner's paper, "Relation of Dental Infection to Systemic Disease," was illustrated by blackboard demonstrations and many lantern slide pictures. He stressed the need for closer cooperation of the dentists and physicians, and pointed out the responsibility of each group. He also urged x-ray pictures before and after extractions and operations as a matter of history and to safeguard both patient and doctor.

The meeting closed with a rising vote of thanks to Dr. Gardner for his extremely interesting paper.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

INDIANAPOLIS MEDICAL SOCIETY

The first regular fall meeting of the Indianapolis Medical Society was held at the Athenaeum, Tuesday, October 6, 1931, at 8:15 p. m. Attendance, 115.

The minutes of the three previous meetings were read and approved.

New applications: Dr. D. H. Row, Dr. John F. Kerr, Jr., Dr. Norman S. Loomis and Dr. J. Louis Fichman.

Applications on second reading: Dr. Tyler J. Stroup, Dr. Robert R. Beach and Dr. Thomas P. Rogers.

Announcements were made concerning the financial status of the *Bulletin*, the bowling league and the invitation to the Dental Society meeting on October 12.

The resolutions as prepared by the various committees on the deaths of Drs. Sterne, Ross, Cabalzer and Pape were read and approved by the society without vote.

Guest Speaker: Hon. Frank P. Baker, judge of the Marion County Criminal Court. Subject: "Thoughts of a Judge." Judge Baker made a very impressive and at the same time an instructive talk. He held the interest of a rather large gathering for an hour. He was interrupted several times by applause.

Some of the points made in the talk were: That there were one-third of a million dollars less property stolen in Marion county in the first nine months of 1931 than in the same period in 1930; that there were 239 less automobiles stolen for the same period. When he took office on January 1, 1931, there were approximately 900 cases to be arraigned and 300 cases on appeal from the municipal courts. These figures have been reduced to 150 cases of all kinds on docket at the present time.

Of the 1,200 cases on January 1, 1931, approximately 50 per cent of the defendants were under twenty-one years of age. At the present time on new cases that are being

write regarding this problem, so I felt that you could act arraignd and appealed approximately 15 per cent are under twenty-one years of age.

Judge Baker seems to have found the solution to ameliorating the crime wave. His sentences have not been of extreme severity or of undue laxity. He states that quick trial with substantial sentences which are enforced without bail is his solution.

Refreshments were served after the meeting.

The regular meeting of the Indianapolis Medical Society was held at the Athenaeum at 8:15 p. m. on Tuesday, October 13, 1931. Attendance, 100. Dr. Asher presided.

The minutes of the previous meeting were approved as read.

New members: Dr. Robert R. Beach, Dr. Tyler J. Stroup and Dr. Thomas P. Rogers.

The following motion, made by Dr. Kelly and seconded by Dr. Leonard, was passed: "That a committee of three members be appointed to study the Constitution and By-Laws and make recommendations as to any revisions necessary before they are reprinted." Dr. Asher appointed the following committee: Dr. W. F. Kelly, chairman; Dr. H. H. Wheeler and Dr. W. E. Tinney, members.

The following case report program was given:

1. "Observations in Post-Operative Obstruction"—F. C. Walker, M.D.
2. "Acute Urinary Retention in the Female"—Wm. E. Tinney, M.D.
3. "Cancer of the Sigmoid"—H. H. Wheeler, M.D.
4. "Agranulocytic Angina"—John H. Warvel, M.D.
5. "Extensive Burn of the Arm"—C. E. Thompson, M.D.
6. "Mastoiditis" (Gradenigo Syndrome)—J. Wm. Wright, M.D.
7. "Polycystic Kidney"—Wm. N. Wishard, Jr., M.D.

Discussion: Drs. Kime, Ricketts, Carmack, Wm. E. King, W. D. Little, Dearmin and Hamer.

Coffee and sandwiches were served after the meeting.

The regular meeting of the Indianapolis Medical Society was held at the Athenaeum, Tuesday, October 20, 1931, at 8:15 p. m. Attendance, 100. Dr. Clark presided.

The minutes of the previous meeting were approved as read.

New application: Dr. I. J. Kwitny.

Dr. Walter F. Kelly made a report for the committee appointed to make recommendations for the revision of the By-laws.

The scientific program was as follows:

1. "The Effect of Combined Simultaneous Arsenobenzine Therapy on the Serological Reaction"—T. D. Rhodes, M.D.
2. "Cellulitis of the Hand"—T. B. Noble, Jr., M.D.

Discussion: Drs. Glass, Belden, Allen, Eberwein, Rupel, Asher, Nafe and Mumford.

Refreshments were served after the meeting.

CHESTER A. STAYTON, M.D.,
Secretary.

CORRESPONDENCE

ARRANGING A SCIENTIFIC PROGRAM

Indianapolis, September 30, 1931.

Editor THE JOURNAL:

I have just completed my service as chairman of the Committee on Scientific Work of the Indiana State Medical Association during its recent meeting and have had, during the past few months, an opportunity to study the problems presented in the formation of and the development of the scientific program of this session. I therefore desire to communicate with you concerning some of the difficulties I have encountered and the problems that have presented themselves for solution hoping this information may prove of some value to the state society in the future.

My experience has been such as to convince me there is need for serious thought in the management of the scientific work of our state society. There is a growing tendency to neglect and minimize the importance of the scientific program and other activities of the organization are occupying more and more time and are constantly encroaching upon this part of our society's work. As the primary purpose of the meeting is for scientific advancement, such a movement certainly cannot meet the approval of the majority of the members, and the seeming lack of interest is, I am convinced, more apparent than real. I feel confident the greater majority of attendants would welcome any movement which would tend to give to them a scientific program of increasing value from year to year.

I found the selection of essayists and the choice of subjects as now made are so uncertain in their results, and the attainment of a program of anything near one's ideal so difficult, that I am inclined to think the present tendency to disregard the greater educational possibilities of such a meeting is directly the result of the present method of supervising the scientific work of the organization.

As I review my experience I am confronted with the following facts which most certainly denied me from the very beginning any degree of success I might have visualized:

First: I had had no previous experience that would be of material help. Other members of the committee had had no previous experience and could be of little assistance.

Second: There was no plan to follow in the selection of essayists nor of subjects. The program had in no way any relationship to past nor future programs.

Third: There was an uncertainty in the development of the program in the relative representation of the various branches of the practice of medicine. This was capable of exciting criticism and did.

Fourth: There being no definite plan for the formulation of the scientific program, the state society fails miserably in stimulating its members to strive to develop medical literature. I found other aims were often the incentive to appear on the program. This is a condition which should be corrected if possible.

Fifth: Methods of choice or out-of-state speakers certainly needs revision.

Sixth: There is an absolute lack of coordination between the various branches of scientific work.

To me the above correctly indicates some of the conditions prevailing in our present method of making a program. I think the Bureau will find them worthy of serious study. That such conditions do not universally prevail in our state societies I would add that I have before me the memorandum on scientific work from one state society which has 3,800 members and has an allotment of 146 papers for one session of their meeting. At the last session of the Indiana State Medical Society we had but twenty-six with a state membership of 2,800.

While I have personal ideas as to a possible solution to the problem it would seem, if the Association should think the subject worthy of investigation, much valuable information could be received by writing various state societies asking for their method of meeting this problem.

Very truly yours,

HENRY O. MERTZ, M.D.

MEDICAL CARE FOR INDIGENT

———, Indiana, October 29, 1931.

Editor THE JOURNAL:

After reading the article in the Medico-Legal Department in the October 15th issue, I felt that something should be done about the present law concerning medical and surgical relief for the poor. The law in general is all right, but is loose in one point, when it allows the township trustee to choose any method he pleases in providing medical care.

First, I will say that I did not know to whom I should

write regarding this problem, so I felt that you could act if you felt it a just point, and pass this on to whom it should go.

In order to make myself clear I will explain the situation in our home township. Our trustee has his own family physician and through personal friendship and political support has appointed a physician as township doctor. The township trustee claims that all this doctor gets is $30 a quarter for this work. I do not believe that is true. Many folks here who formerly had work and paid their own physicians now are down and out and when they go to the trustee for medical help he directs them to the appointed doctor. This doctor discourages all of these cases in coming to him, excepting the surgical and obstetrical cases, which we feel brings the physician extra fees. Then these folks who should have township help come to the remaining doctors of the community with the story that the township doctor neglects them and puts them off as much as possible. They beg us to help them. It is difficult to turn down old patients because they cannot pay, and it is difficult to give them drugs and pay for them out of our own pockets. Doctors in other townships are having similar problems so we feel that this is not just a local problem.

The only remedy I can see is for some legislative action in the state, either investigating the work of appointed doctors or requiring the trustees to omit appointments and pay each doctor for his own charity cases.

We feel that if a doctor accepts the appointment he should fulfill the obligation. On the other hand it would be fairer to the down and out folks if they are allowed to be treated by their own family doctor.

If this letter is published, please omit name.

Yours fraternally,

----------, M.D.

BOOK REVIEWS

Books received since October 1, 1931:

INFECTIONS OF THE KIDNEY. By Meredith F. Campbell, M.D., F.A.C.S., attending urologist, Babies' Hospital, New York Nursery, and Child's Hospital, New York. A Harper Medical Monograph. 343 pages. 40 illustrations. Flexible binding. Price $3.00. Harper & Brothers, Publishers, New York and London, 1931.

SURGICAL CLINICS OF NORTH AMERICA. Volume 11, No. 5. Pacific Coast Surgical Association Number, October, 1931. 279 pages with 109 illustrations. Per clinic year, February, 1931, to December, 1931, paper, $12.00; cloth, $16.00. W. B. Saunders Company, Philadelphia and London, 1931.

SIMPLE LESSONS IN HUMAN ANATOMY. By B. C. H. Harvey, M.D., Professor of Anatomy, University of Chicago. 434 pages, profusely illustrated. Cloth. Price $2.00. American Medical Association, Publishers, Chicago, 1931.

WHAT THE PUBLIC SHOULD KNOW ABOUT CHILDBIRTH. By Walker B. Gossett, M.D. 290 pages. Cloth. Price $2.00. The Midwest Company, Publishers, Minneapolis, Minn.

SIMPLIFIED DIABETIC MANAGEMENT. By Joseph T. Beardwood, Jr., A.B., M.D., F.A.C.P., chief of diabetic clinic Presbyterian Hospital, Philadelphia; and Herbert T. Kelly, M.D., A.A.C.P., associate in diabetic clinic, Presbyterian Hospital, Philadelphia; diets prepared with collaboration of Elsie M. Watt, A.B., formerly dietitian, diabetic clinic, Presbyterian Hospital, Philadelphia. 189 pages. Cloth. Illustrated. Price $1.50. J. B. Lippincott Company, Philadelphia and London, 1931.

GYNECOLOGY AND UROLOGY FOR NURSES. By Samuel S. Rosenfeld, M.D., F.A.C.S., Adjunct Obstetrician and Gynecologist, Lebanon Hospital, New York City. 230 pages. Illustrated. Cloth. Price $2.00. William Wood & Company, Publishers, New York, 1931.

SURGICAL PATHOLOGY OF THE SKIN, FASCIA, MUSCLES, TENDONS, BLOOD AND LYMPH VESSELS. By Arthur E. Hertzler, M.D., Surgeon to the Agnes Hertzler Memorial Hospital, Halstead, Kansas, Professor of Surgery, University of Kansas. 301 pages. Illustrated. Cloth. J. B. Lippincott Company, Philadelphia and London, 1931.

SURGICAL PATHOLOGY OF THE DISEASES OF BONES. By Arthur E. Hertzler, M.D., Surgeon to Agnes Hertzler Memorial Hospital, Halstead, Kansas, Professor of Surgery, University of Kansas. 272 pages with 211 illustrations. Cloth. J. B. Lippincott Company, Philadelphia and London, 1931.

APPROVED LABORATORY TECHNIC. Prepared under the auspices of The American Society of Clinical Pathologists. By John A. Kolmer, M.D., Dr.P.H., D.Sc., LL.D., Professor of Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania; and Fred. Boerner, V.M.D., Associate Professor of Bacteriology, Graduate School of Medicine, University of Pennsylvania; assisted by C. Zent Garber, A.B., M.D., Associate in Pathology, Peking Union Medical College; and committees of the American Society of Clinical Pathologists composed of Dr. J. H. Black, Dr. H. J. Corper, Dr. A. G. Foord, Dr. A. S. Giordano, Dr. F. W. Hartman, Dr. P. Hillkowitz, Dr. R. A. Keilty, Dr. R. A. Kilduffe, Dr. K. M. Lynch, Dr. A. H. Sanford and Dr. F. E. Sondern. 663 pages, with 11 colored plates and 300 illustrations in the text. Cloth. Price $7.50. D. Appleton & Company, Publishers, New York and London, 1931.

SURGICAL PATHOLOGY OF THE GENITO-URINARY ORGANS. By Arthur E. Hertzler, M.D., Surgeon to Agnes Hertzler Memorial Hospital, Halstead, Kansas, and Professor of Surgery, University of Kansas. 286 pages with 222 illustrations. Cloth. Price $5.00. J. B. Lippincott Company, Philadelphia and London, 1931.

Book reviews:

SIMPLIFIED DIABETIC MANAGEMENT. By Joseph T. Beardwood, Jr., A.B., M.D., F.A.C.P., and Herbert T. Kelly, M.D., A.A.C.P., of the diabetic clinic, Presbyterian Hospital, Philadelphia. Diets prepared with collaboration of Elsie M. Watt, A.B., formerly dietitian diabetic clinic, Presbyterian Hospital, Philadelphia. 190 pages, illustrated. Cloth. Price $1.50. J. P. Lippincott, Philadelphia, London and Montreal, 1931.

This book contains many helpful instructions that will prove valuable to the physician and to the diabetic patient. It includes general considerations of diabetes, principles of treatment, measurement of food, use of insulin, method of injecting insulin, cautions necessary with insulin treatment, and other essentials that a diabetic should know to intelligently cooperate in the correct management of his condition. There also are diet charts and information concerning the unit measurement, charts of food values, recipes and suggested menus. The physician may find this book helpful, but it will be most welcome to the intelligent diabetic patient for the information contained in the book is written in such a non-technical manner that the lay reader may easily assimilate the facts.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

PENTOBARBITAL-SODIUM.—Sodium ethyl (1-methylbutyl) barbiturate. Sodium ethyl (methylpropylcarbinyl) barbiturate. The monosodium salt of ethyl-(1-methylbutyl) barbituric acid. Pentobarbital-sodium differs from barbital, U. S. P. (sodium diethylbarbiturate) in that one of the ethyl groups of the latter is replaced in the former

by a 1-methylbutyl group. The actions and uses of pentobarbital-sodium are essentially similar to those of barbital, but it is effective in smaller doses. The action is of relatively brief duration, which may constitute an advantage, especially when relatively large doses are administered. It is used as a sedative, particularly prior to local, general or spinal anesthesia. It can be used safely for such purposes only by those who have had adequate experience and who are familiar with the literature concerning such use. The drug may be administered by mouth or rectum; intravenous injection is considered unsafe.

Capsules Pentobarbital - Sodium - Abbott, 1½ Grain.—Each capsule contains pentobarbital-sodium-N. N. R., 0.1 Gm. (1½ grains). Abbott Laboratories, North Chicago, Ill.

Pulvules Pentobarbital-Sodium-Lilly, 1½ Grains. Each pulvule (capsule) contains pentobarbital-sodium-N. N. R., 0.1 Gm. (1½ grains), and starch, 0.13 Gm. Eli Lilly & Co., Indianapolis, Ind.—*(Jour. A. M. A.*, September 5, 1931, p. 705.)

Skiodan.—Methiodal.—The sodium salt of monoiodo-methane-sulphonic acid. Skiodan contains fifty-two percent of iodine. It is proposed as a therapeutically indifferent medium for roentgenography, especially for visualization of the urinary tract either by intravenous injection or by direct injection into the renal pelvis through a ureteral catheter. It has also been administered rectally. Winthrop Chemical Co., Inc., New York.

Gynergen Solution 0.1 Percent.—Each cc. of solution contains 1 mg. of gynergen (New and Nonofficial Remedies, 1931, p. 183) and a small excess of tartaric acid. Sandoz Chemical Works, Inc., New York.

Squibb Chocolate Vitavose.—A mixture of Squibb's vitavose (New and Nonofficial Remedies, 1931, p. 245) 30 percent, with cocoa, milk solids and sucrose. E. R. Squibb & Sons, New York.—*(Jour. A. M. A.*, September 12, 1931, p. 779.)

Scarlet Fever Streptococcus Toxin-Squibb (New and Nonofficial Remedies, 1931, p. 370).—This product is also marketed in packages of six 10 cc. vials of toxin containing, respectively, 500, 2,000, 8,000, 25,000, 40,000 and 40,000 skin test doses per cc. E. R. Squibb & Sons, New York.—*(Jour. A. M. A.*, September 26, 1931, p. 930.)

FOODS

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

Del Maiz Niblets Brand (Minnesota Valley Canning Company, Le Sueur, Minn.)—A "vacuum" packed canned whole-kernel corn containing no added salt or sugar and very little added water. It is claimed to be the canned whole kernels of a special breed of corn packed in vacuum to protect the flavor and processed with only a small amount of added water to retain the form of the original kernels.

Green Giant Brand Great Big Tender Peas (Minnesota Valley Canning Company, Le Sueur, Minn.).—Canned ungraded "fancy quality" Green Giant variety peas sweetened with sugar and seasoned with salt. This product is claimed to make an appetizing and easily digestible puree for infants.

Bemax (Schieffelin & Co., New York.—An entire cereal germ product consisting of a mixture of selected rye, barley, and wheat germ, in which rye germ ordinarily predominates. It is claimed to be a palatable and easily digestible food, stabilized to insure retention of vitamin B potency and against deterioration and rancidity and to be one of the richest natural sources of vitamin B. Its use is claimed to restore to the diet vitamin B and other nutritional elements ordinarily lost by the degermination of cereals, and to be a valuable and convenient supplement to a diet suspected of being deficient in vitamin B.

Gorman's Extra Fine Bread (Special Loaf) (Gorman's Bakery, Inc., Central Falls, R. I.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

Kew Bee Bread (Sliced and Unsliced) (Parker-Buckey Baking Company, New Britain, Conn.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

Aunt Martha Bread (Wind's Bakery, Whitesboro, N. Y.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

Smaco (200) Whole Milk Sterilized (S. M. A. Corporation, Cleveland, Ohio).—A canned sterilized homogenized whole milk. It is recommended for all uses of whole milk and especially for infant feeding.—*(Jour. A. M. A.*, September 12, 1931, p. 780.)

My Bread (My Bread Baking Company, New Bedford, Mass.).—A white bread made by the straight dough method. It is claimed to be a bread of good quality.

Harvest Bread (Hecht's) (Hecht's Bakery, Bristol, Tenn.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.—*(Jour. A. M. A.*, September 19, 1931, p. 853.)

ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of Accepted Devices for Physical Therapy:

Victoreen r-Meter.—The Victoreen r-meter is an instrument designed to determine rapidly the intensity of roentgen rays at any point in roentgens per minute. The instrument consists of a small ionization chamber rigidly connected to a string electrometer by means of a metallic tube. It is supplied in four scale values, 0-5, 0-10, 0-25, 0-50 roentgens, the total value depending on the range of intensities to be measured. The construction of the apparatus includes shielding from extraneous rays, and the apparatus may be used with any quality of roentgen radiation from 30 peak kilovolts upward. Victoreen Instrument Company, Cleveland, Ohio.

Fricke-Glasser X-ray Dosimeter.—The Fricke-Glasser X-ray Dosimeter (or, more properly, quantimeter) is an instrument designed to measure the quantity and intensity of roentgen rays and is calibrated in international roentgens. The instrument consists of a small ionization chamber and a string electrometer connected to each other by means of a rigid metal tube filled with ceresin and a flexible metal tube. The instrument can be mounted on a table and can thus easily be moved from one treatment room to another. The manufacturers claim that the error in accuracy does not exceed one percent. The ionization chamber is intended to be placed directly on the patient in the field of irradiation. Victoreen Instrument Company, Cleveland, Ohio.—*(Jour. A. M. A.*, September 12, 1931, p. 729.)

PROPAGANDA FOR REFORM

Silver Nitrate Ampules and Capsules.—The A. M. A. Chemical Laboratory undertook an investigation of silver nitrate capsules and ampules to determine whether the market supply was satisfactory. The Laboratory found that the various brands of silver nitrate ampules contained in both wax and glass ampules showed that the strength of the silver nitrate solution is generally somewhat greater than the amount claimed and that practically none of the silver is absorbed by the wax ampule. The quantity of solution found in the glass ampules complied with that claimed. On the other hand, in the wax ampules not only did the quantity of solution vary with each brand, but the products of the various firms differed markedly, ranging from 0.07 cc. to as high as 0.26 cc. The Laboratory points to the possible danger from fragments of glass which may form when the glass ampule is opened and which may reach the infant's eye when the silver solution is instilled. The Council on Pharmacy and Chemistry considered the report of the

Laboratory and authorized its publication. In recommending endorsement and publication of the report the Council's referee expressed gratification at the reassurance given by the report that the wax capsules do not inactivate the silver nitrate and called attention to the fact that the use of glass ampules may be an open invitation to accident. —(*Jour. A. M. A.*, September 5, 1931, p. 706.)

NEW AND NONOFFICIAL REMEDIES.—There is no better way of keeping up to date on the newer remedies than to follow the work of a competent, unbiased group of scientific investigators, working altruistically in the interest of the medical profession. The Council on Pharmacy and Chemistry is such a group. New and Nonofficial Remedies is its list of accepted products. The book is published annually and describes accepted articles and includes facts the physician should know. It keeps physicians up to date regarding the newest remedies. It advises physicians of products not worthy of his attention. It is useful to the physician when he is importuned by the detail man to prescribe a new specialty. (*Jour. A. M. A.*, September 5, 1931, p. 707).

MISBRANDED "PATENT MEDICINES."—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Sakula Salve (The Yamato Co., Inc.), consisting essentially of fat, wax, rosin and camphor. Zarpas Ointment (Nick Zarpas), containing camphor, sulphur, ground black mustard and red pepper. Anti-Flamma Plaster (Bayless Distributing Co.), consisting red lead and linseed oil. Witmer's Coughine (National Drug Co., Cardin, Okla.), consisting essentially of small amounts of ammonium chloride, creosote, guaiacol, camphor, chloroform, sugar and water. Acotin (J. R. Watkins Co.), tablets containing phenacetine (acetphenetidin), aspirin (acetylsalicylic acid) and starch. Emerson's Honduras Sarsaparilla (Emerson Medicine Co.), consisting essentially of extracts of plant drugs, including a laxative, traces of salicylic acid, alkaloids, glucosides and potassium iodide, alcohol and water. Ponca Compound (Mellier Drug Co.), tablets containing baking soda, sulphur and plant extractives. Kaufmann's Sulphur Bitters (A. P. Ordway & Co.), consisting essentially of extracts of plant drugs, including aloe, podophyllum and a bitter drug, such as gentian, a very small amount of sulphur in alcohol and water. Torb (Crystal Chemical Co.), an ointment with a petrolatum base, mineral matter such as clay, and a small amount of boric acid. (*Jour. A. M. A.*, September 5, 1931, p. 723).

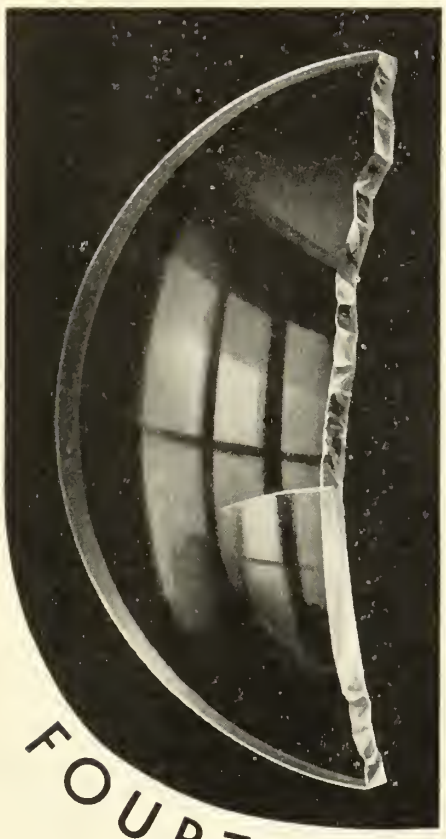
MISBRANDED "PATENT MEDICINES".—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of the Agriculture which enforces the Federal Food and Drugs Act: Chumuckla Mineral Water (Chumuckla Spring Co.), containing filthy and putrid animal and vegetable substance. Anti-Uric (The Anti-Uric Co.), consisting essentially of extracts of plant drugs, traces of formaldehyde, volatile oils, alcohol and water. Hot Springs Improved Sarsaparilla Compound (Lauber and Lauber Co.), consisting essentially of potassium iodide, Rochelle salt, a small amount of benzoic acid, a laxative plant drug, alcohol, sugar and water flavored with oils of sassafras and wintergreen. Katarrol (sold in Porto Rico), consisting essentially of plant extractives, menthol, guaiacol, glycerin, small amounts of alcohol, sugar and water. Speedy Laxative Cold Tablets (B. C. Leo & Co.), containing acetanilid, a small amount of cinchona alkaloids, a laxative plant drug, and red pepper. Improved Bronchial Lozenges (Parke, Davis & Co.), consisting essentially of licorice, red pepper, sugar and oil of anise. Orium (Vicksburg Chemical Co.), Orium Medicated Salve consisting essentially of petrolatum, menthol, camphor, eucalyptus and pine oils; Liquid Orium consisting essentially of liquid petrolatum, menthol, camphor, eucalyptus and turpentine, or pine oil. Humphrey's Seventy-Seven (77) ("Humphrey's Homeopathic Medicine Co.), consisting essentially of sugar, with traces of arsenic and extracts of plant drugs. Glycero Medicated Plasters (Physicians' Chemical and Drug Co.), containing clay, glycerin and oil of sassafras. Glipol (Brewer & Co., Inc.), consisting essentially of ammonium chloride, guaiacol, potassium acetate, sodium salicylate, glycerin, oil of peppermint, a trace of choloroform, 1 per cent of alcohol, sugar and water. Hailperin's Antiseptic Healing Ointment (Manhattan Drug Co.), containing petrolatum, wax and a wool-fat base, zinc oxide, boric acid, carbolic acid, sulphur, menthol and camphor. (*Jour. A. M. A.*, September 12, 1931, p. 796).

FRENLY ENEMA CREAM NOT ACCEPTED FOR N. N. R. —Frenly Enema Cream (Frenly Products, Inc., New York City) is offered to physicians without a statement of composition either on the label or in the advertising. In the information furnished the Council on Pharmacy and Chemistry the preparation was stated to have the following composition: "Powdered Acacia ½ oz., Powdered Tragacanth ¼ oz., Castor Oil 6 ozs., Glycerin 1 oz., Sodium Iodide 40 grains, Menthol 20 grains, Alcohol 95% 1 Dram, Ichthyol 2 Drams, Benzoate of Soda 2%, Water q. s. ad 20 ozs." No evidence was offered to show that the addition of castor oil, glycerin, sodium iodide, menthol, sodium benzoate and ichthyol to a rectal enema is rational. While castor oil is the only ingredient which is present in considerable amount, there appears to be no evidence that the drug is efficacious when administered by rectum. The Council found Frenly Enema Cream unacceptable for New and Nonofficial Remedies because it is a complex, unscientific mixture which is marketed under a name that is uninforming as to composition and is therapeutically suggestive; without a declaration of composition on the label or in the advertising; and with claims that are unwarranted. (*Jour. A. M. A.*, September 19, 1931, p. 852).

"MINERALOGEN" NOT ACCEPTED FOR N. N. R.—Under the name "Mineralogen" Von Bremen-AschedeBruyn, New York, offers a mixture stated to be manufactured in Germany and stated to contain, in 100 parts: "Calcium phosphate, 25.61; Calcium lactate, 49.250; Magnesium sulphate, 2.956; Sodium sulphate, 3.450; Bismuth subnitrate, 1.725; Strontium lactate, 1.477; Sodium bromide, 7.88; Sodium silicate, 1.477; Alum ust., 0.736; Albumin leviss., 5.439." The therapeutic indications for "Mineralogen" are stated to be chiefly: "In the Gerson-Herrmannsdorfer-Sauerbruch dietetic treatment of skin tuberculosis, Tb. fungosa, scrofuloderma, tuberculosis of bones, glands, mucosa, kidneys and bladder, pulmonary tuberculosis and in the dietetic preoperative treatment of pulmonary tuberculosis." "Mineralogen" is part and parcel of the Gerson-Herrmannsdorfer-Sauerbruch dietetic treatment of tuberculosis. The Council on Pharmacy and Chemistry found Mineralogen unacceptable for New and Nonofficial Remedies because the name is therapeutically suggestive and does not indicate the composition; because it is a complex mixture of salts containing constituents, the therapeutic value of which has not been demonstrated; and because the therapeutic value of the mixture as an adjuvant to the tuberculosis diet has not been established. (*Jour. A. M. A.*, September 19, 1931, p. 852).

ALBUTESTA.—When a well-known substance is marketed with a proprietary name, hiding its real identity and masquerading as a unique reagent, it is time for the forces, which the physician has created to safeguard himself, to report the truth to him. The A. M. A. Chemical Laboratory has done this by reporting on Albutesta (Menley and James, Ltd.) The Laboratory found Albutesta to be a twenty per cent solution of sulphosalicylic acid. It is not new; just an old reagent with a new name at a fancy price. The Laboratory contends that the composition of diagnostic reagents should be known so that users may know the limitations. (*Jour.* A. M. A., September 19, 1931, p. 852).

STREPTOCOLL NOT ACCEPTED FOR N. N. R.—Streptocoll (The Soshokee Co., East Orange, N. J.) was presented to the Council on Pharmacy and Chemistry as "a very active form of colloidal sulphur which differs from all other colloids of sulphur in that it contains no protective



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TRUTH ABOUT MEDICINE

(Continued from page 648)

colloid." The preparation was proposed for oral and intravenous use in a variety of conditions. The Council found Streptocoll unacceptable for New and Nonofficial Remedies because the name Streptocoll is uninforming and therapeutically suggestive and because the composition of the product is indefinite and the therapeutic claims unwarranted. *(Jour. A. M. A.,* September 19, 1931, p. 853).

SOME DENVER FRAUDS.—The Home Products Company, Hormex Company, Vitatone Remedy Company, West Medicine Company and Western Medical Clinic, all indecent swindles, have been barred from the mails. Eugene P. Gurley and Robert T. Nash have been operating a concern under two trade names: Home Products Company and Hormex Company. Both were a continuance of the Vital-O-Gland Company which has previously been prosecuted. The Home Products Company was selling preparations for the alleged sexual stimulation of men and of women. The Hormex Company's nostrums were, according to the government report, substantially the same products under different labels. The Vitatone Remedy Company was similar in scope to the Home Products Company and the Hormex Company: it sold alleged cures for sexual weakness. The West Medicine Company and Western Medical Clinic sold through the mails two preparations, 909 and Brigham Young Tablets. The first was sold as a cure for syphilis; the latter as a cure for "lost manhood." *(Jour. A. M. A.,* September 19, 1931, p. 868).

OLAJEN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Olajen (marketed by Olajen, Inc., New York City) is advertised as "Olajen Colloidal" a "preparation which utilizes a vehicle of novel form to combine calcium and other physiologic salts with lecithin in a colloidal base rendering its ingredients immediately assimilable after oral administration"; the preparation being said to be indicated in treatment "when the normal calcium is low, when the patient is undernourished, when bodily resistance must be raised, and when bronchial affections hang on and sap vitality." The Council declared "Olajen" unacceptable for New and Nonofficial Remedies in that it is a needlessly complex and unscientific mixture of inadequate dosage, and in that it is marketed with unwarranted therapeutic claims under a nondescriptive title. *(Jour. A. M. A.,* September 26, 1931, p. 930).

HAYNER'S NORMALINE NOT ACCEPTED FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Hayner's Normaline, according to the trade package, is "The Formaldehyde-Chlorine Germicide and Deodorant," and that this statement does not declare the amount of formaldehyde; does not declare the presence or amount of zinc chloride; and is misleading in that it suggests the presence of active chlorine in the product. The advertising submitted to the Council by the Norman C. Hayner Company contained no quantitative statement of the composition of the product. In the information furnished the Council the statement was made that the preparation is a "combination of Chloride of Zinc, 40 volume formaldehyde, perfume" but the amount of formaldehyde and of zinc chloride in a given quantity of the preparation is not declared. The Council declared Hayner's Normaline an unoriginal preparation of formaldehyde and zinc chloride which is marketed under a non-informing name without a quantitative statement of composition on the label or in the advertising and with claims that are unwarranted and misleading. *(Jour. A. M. A.,* September 26, 1931, p. 931).

FROM N. N. R. TO THE U. S. P.—Of the forty new products in the United States Pharmacopeia X, thirty-one came from New and Nonofficial Remedies. No better recommendation can be given for "N. N. R." *(Jour. A. M. A.,* September 26, 1931, p. 931).

MISBRANDED "PATENT MEDICINES."—The following products have been the subject of prosecution by the Food and Drug Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Smith's Blood, Liver and Kidney Remedy (The Health Aid Laboratories, Inc.), consisting essentially of extracts of plants(drugs, potassium acetate, small amounts of epsom salts, potassium iodide and salicylic acid in alcohol and water. Stone's Capsules (Allen and Company), containing acetanilid, cinchonine, caffeine and a laxative drug. Takara Antiseptic Powder (The Takara Laboratories), consisting of a mixture of boric acid, ammonium alum, white vitriol, carbolic acid and traces of menthol. Gen Sen Tonic (Beach's Wonder Remedy Company), consisting essentially of epsom salt, aloes, senna, small amounts of alkaloids and benzoic acid, oil of anise and water. Beach's Wonder Oil (Beach's Wonder Remedy Company), consisting essentially of gasoline, kerosene and oil of sassafras. Hollie's Reduso Wafers (The Natural Food Products Company), containing an extract from a laxative plant drug. Epicol (Epicol Products Company), consisting essentially of baking soda, table salt, saccharine, volatile oils, including menthol and wintergreen, a trace of borax, alcohol and water. L-O Compound No. 1 and L-O Compound No. 2 (The Medical Supply Company), each containing chloral hydrate, volatile oils including camphor and oil of wintergreen, and traces of iodides and iodine. *(Jour. A. M. A.,* September 26, 1931, p. 946).

ABSTRACTS

MEDICAL ANALYSIS OF A THOUSAND MARRIAGES

The material studied by ROBERT LATOU DICKINSON, New York *(Journal A. M. A.,* Aug. 22, 1931), was drawn from the case histories of a gynecologist and obstetrician, selected from about 4,000 records of married women seen in private practice. On the basis of his study he concludes that the sole method for planning intelligent prevention and treatment of maladjustment in marriage is systematic study of full case histories of success and failure. Though only four percent came to the point of divorce or separation, nearly half showed some degree of difficulty; one-sixth had considerable persistent distress in intercourse; eighteen wives were long-time married virgins, not from impotence but from ignorance. To define disorders specifically is the first step toward a program of forestalling them: in this case, by sex education of parents and educators, of children and adolescents and engaged couples; and by careful premarital examination and by the prompt recognition that is necessary for cure. The series, drawn from the socially normal, represents chiefly the educated urban couple, with the wife in good general health but needing the advice of an obstetrician or gynecologist. Fertility has an important psychosexual correlation with coitus, since, in a type wherein the woman has a relatively high degree of independence, it tends to vary as the sexual harmony varies. The woman has a capacity for sexual desire, lifelong, inconsistent and fluctuating, and found in every individual fully studied. The manifestations of this desire and her ability to turn them to happy issues are extraordinarily dependent on her early life. Even when there are no children, complete unity in marriage stands on a basis of sexual unity. Bodily expressions of love, in their finesse and variety and power, are reflected in other phases of the life of the couple. Sexual abstinence in marriage ordinarily is not practical. It has reactions in egotism. These take the direction of idiosyncrasy of opinion or act, derangement of health or disturbance of the emotional life. Abstinence is practiced from conviction by about two percent of the series. While intimate sex relations are most completely welcomed by women when they are adjusted to personality as a whole, there is a definite physical technic that can be developed and kept perfect only through experiment. The physical difficulty typical of the couple in our series is that their common knowledge and the husband's technic are not adequate, and anatomic considerations have received scant attention. There is also a definite psychologic technic of surmounting barriers and entering into

the feelings of another. The mental balk is in making sex fit the rest of life, or in straight facing of need of training in adaptation and expertness. The sexual difficulties revealed are not in the main organic in the woman and, save in exceptional cases, not functional. They are variants of mental and emotional behavior. The author believes that, so far as emotion and clamor of complaint push to the front of the stage, this analysis is likely to take its place as one of the studies of unhappiness in marriage. But this is not actually or statistically the case, and the figures deny it. Moreover, it must not be forgotten that, of the maladjustments here shown, many are passing or relievable and most are preventable. Physicians face a medical obligation toward further intensive inquiry and toward the training of a personnel equipped to conduct the marriage advice center, and to teach in the physicians' office chair. They must do their part to prevent the preventable, and to foster successful and stable unions.

RECENT FACTS ON TRANSMISSION OF TUBERCULOSIS

J. Arthur Myers, Minneapolis (*Journal A. M. A.*, Aug. 1, 1931), deprecates the fact that students of medicine and nursing are being left with the impression that it is a good thing to come in contact with patients suffering from tuberculosis and receive just the right dose to give them a positive tuberculin reaction. Under such conditions the dosage is entirely uncontrolled. The number of bacilli which the student's body receives from contact with tuberculous patients may vary from a few to huge numbers. Where careful observations have been made in this country, it has been shown that approximately thirty percent of the probationers in schools of nursing react positively to the tuberculin test, but after they have taken tuberculosis services from eighty to one hundred percent have been found to react positively. Since a positive reaction indicates an allergic state and since there is reason to believe that the destructive phase of tuberculosis is brought about by the allergic reaction, it would seem obvious that nothing but harm has been done by allowing students to take unmeasured doses of tubercle bacilli into their bodies and develop a state of allergy. But what immediate evidence is there that allergy is dangerous to the students? The best evidence is that from five to twelve percent of student nurses have presented themselves with tuberculous disease that required treatment soon after allergy was manifested by a positive tuberculin reaction. Pleurisy with effusion is looked on as one of the early manifestations of tuberculosis. In itself, it is an allergic reaction. Many patients are desperately ill from it over a considerable period of time. Abundant clinical experience has taught that pleurisy with effusion is frequently followed by pulmonary tuberculosis of the destructive type. Therefore, in the light of such evidence, who will dare state that an allergic reaction, as manifested by the tuberculin test and brought about by exposure to human beings suffering from tuberculosis, is of benefit to a student? The author desires to leave the answer to the reader and to the students themselves as to whether exposure of students to tuberculous patients should be allowed to continue or whether it should be prevented by the adoption of an adequate contagious technic.

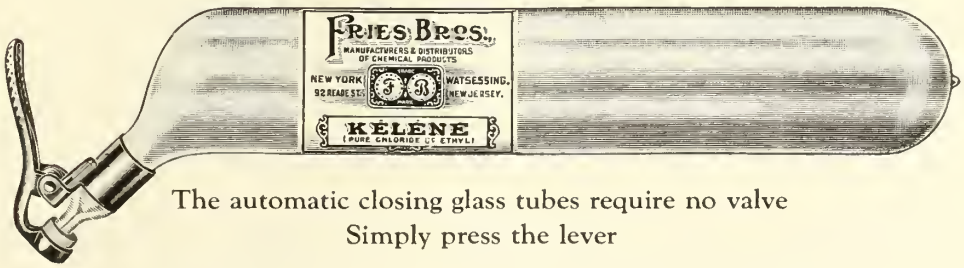
SIGNIFICANT HEMORRHAGIC RETINAL LESIONS IN BACTERIAL ENDOCARDITIS (ROTH'S SPOTS)

William Brown Doherty and Max Trubek, New York (*Journal A. M. A.*, Aug. 1, 1931), call attention to the fact that the characteristic elliptic retinal hemorrhages with white centers occur in the bacterial endocarditides, acute and subacute, and in the severe anemias, notably pernicious anemia. The discovery of this lesion because of its significant appearance may aid in early diagnosis. The lesion occurs in both eyes, with a little greater frequency in the left eye. The lesion has little prognostic value in subacute bacterial endocarditis; in several instances it had appeared and disappeared in successive crops many months before death. The authors suggest that the designation "retinitis of endocarditis" might after further study be appropriately applied.

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ORIGINAL ARTICLES

NON-TUBERCULOUS INFECTIONS OF THE LUNGS*

PAUL D. CRIMM, M.D.
EVANSVILLE

If we accept the fact that the only conclusive evidence for pulmonary tuberculosis is the finding of tubercle bacilli in sputum, we are easily able to make a differential diagnosis of either a tuberculous or non-tuberculous infection of pulmonic tissue. In so doing we must bear in mind that many tuberculous infections of the lung tissue may not produce tubercle bacilli, especially at the time of the patient's examination. We are forced to bring into play other evidence, even though presumptive, in the absence of the acid fast organism, before we can say that any lung infection is tuberculous. Likewise, it is sometimes necessary to carry further the differentiation of acid fast organisms in order to make a final diagnosis.

The incidence of a few non-tuberculous infections of the lung not infrequently vary with occupational and environmental influences. Pneumoconiosis illustrates this statement, since a great many people work and live in a more or less quantity of organic or inorganic dust. Organic dust such as tobacco dust, dust produced from wheat and oats, or the grinding of rags rarely ever causes pneumoconiosis because the moisture in the trachea and larger bronchi washes back the dust to the mouth. An acute attack may result from this kind of dust. For example, workers not adapted to the harvest field often develop headache, fever and chills, and present a diagnosis of bronchitis until they become immunized to the pollens. It might be well to mention that the high mortality rate due to tuberculosis among those who work in organic dust is in most cases due to the patients' living conditions.

We are fortunate that the average quantity of the most common inorganic dust, namely, anthracosis, in the lung tissue of even coal miners does not generally prove noxious. Even the far advanced case of anthracosis may complain of few subjective symptoms and reveal few physical signs of any importance, but his lungs at autopsy show how extensive a pleuritis and fibrosis is present.

The patient's history aids in making a diagnosis of siderosis, byssinosis, and silicosis. The sharp angular particles of dust as in silicosis give the most mechanical injury to the lung tissue. Until considerable fibrosis develops, diminished expansion of the chest is not discernible. The bilateral infiltration of silica evidenced by the fibrosis in the mid portion of each lung is quite diagnostic in roentgenogram of the early case. In the advanced case, the lower two-thirds of each lung field are involved. As a rule the apices are clear, or clearer, than the remaining lung field. Unless the sharp dust particles cause much pleurisy or bronchiectasis, the patient is symptom free. Ofttimes, however, he comes to the physician because of a co-existing lung infection. A great many cases unless x-rayed routinely by industrial concerns are not seen clinically until they are complicated by pulmonary tuberculosis.

Bronchiectasis is a much more common respiratory condition than is generally believed to exist. All chronic bronchitis may be potential cases of bronchiectasis. Repeated infections of the gums, para-nasal sinuses, tonsillitis and some of the acute exanthemata contribute largely to the prevalence of bronchial tree pathology. We are prone to think of this dilatation of the bronchi as being associated with a classical textbook picture of clubbing of the fingers, respiratory distress, and cyanosis in patients who have an occasional hemorrhage, cough and production of foul, purulent sputum. As a matter of fact, there are constantly under our care many cases of mild bronchiectasis brought about by a previous infection. Repeated attacks of bronchitis, influenza, pleuritis, the pneumonias, and tuberculosis leave the bronchial tree with a certain amount of fibrosis where mucous and infected material may collect. This occurs most often in the dependent portions of the lung, taking the form of either cylindrical or sacculated dilatation. Since adult tuberculosis most frequently occurs in the upper lobes, here we find bronchiectasis located as a rule in the upper trunks. The patient with an arrested case of tuberculosis is fortunate in healing his lesions with a mild bronchiectasis as a result. The patient with a daily expectoration of a little purulent sputum from small sclerotic

*Presented before the Indiana State Medical Association at the Indianapolis session, September, 1931.

areas should be kept under observation and treated accordingly. The most satisfactory treatment is to maintain a healthy constitution so as to prevent future recurring respiratory infection. We can further prevent bronchiectatic formation by keeping in bed for a longer period of time the patient with acute bronchitis, pleurisy, or pneumonia.

A follow-up of pneumonia is particularly essential. The following case illustrates the importance of such, as well as the duration of bronchiectasis. This patient had pneumonia at the age of ten, again at the age of twelve, followed in about a year and a half by double pneumonia. Subsequent to the last attack of pneumonia he began to expectorate considerable pus, the quantity of which did not decrease materially from year to year for a period of twenty-three years. The patient worked every day until he began to expectorate, during the twenty-fourth year, more pus than usual. He complained of occasional nausea and vomiting, increased odor of sputum and respiratory distress. A few months prior to this complaint he received a series of subcutaneous injections of a bacterial vaccine. Moist rales were audible at both bases of the lungs with signs of cavitation in the right lower lobe. After lipiodol injection a roentgenogram showed a bilateral bronchiectasis with a lung abscess on the right. Earlier treatment or more careful treatment following his initial pneumonia infection may have prevented not only a prolonged but the final diagnosis.

Physical findings in any case of bronchiectasis conform to the type and extensiveness of the lesions. In the absence of an active tuberculosis, no one should hesitate to make use of lipiodol injection to ascertain the true condition of any bronchial tree wherein one suspects fibrosis.

Approximately one-half of the non-tuberculous lung abscesses follow some operative procedure, tonsillectomy receiving the greatest burden of responsibility. Aspiration of foreign material and pneumonia predominates other similar causes. Most clinicians report that multiple abscesses are more frequently found than the solitary abscess, although in my experience the reverse has been true. The early lung abscess ushers in a toxic reaction with night sweats, high fever, chills and a rapid pulse. Beginning cough is tight with scanty expectoration. If the abscess later ruptures into a bronchus, the patient invariably will give a history of a sudden copious expectoration. Hemorrhage occurs more often in an aged abscess. The acute symptoms more often subside and the patient in walling off the cavitation may live for a long period of time before lethal exodus occurs. Outside of distressed breathing, club fingers, and a haggard expression, being under weight and under nourished, the patient's greatest embarrassment is the daily expectoration of the cavity's contents. This occurs often at definite intervals of time during every twenty-four hours. Here again lipiodol injection has proven itself a useful adjunct in determining the location and extension of the cavitation.

No doubt many early lung abscesses heal of their own accord in a few months' time. I recently saw a patient who had an abscess in the right lower lobe following a pneumonia infection. The patient had had a rather copious daily expectoration for six or eight weeks before this examination. He gave a history that he noticed a decreased expectoration dating from the time that he had been working on the lawn, bending over and pulling weeds. My advice to him was to continue a light amount of work in a bent posture. In two more months his symptoms and abscess entirely disappeared.

We must also keep in mind that the chief offending organism in some cases of lung abscess and bronchiectasis is due to the fusiform spirochetal organism. This ofttimes follows the ordinary Vincent's infection of the upper respiratory tract. This organism, according to Baker[1], is one of the responsible etiological factors in bronchial asthma. Castellani[2] says that bronchial spirochetosis is frequently mistaken for tuberculosis. Vincent[3] says that in pulmonary gangrene the bacillus fusiformis is more important than the spirocheta Vincenti. He further states that the site of the spindle-shaped anerobic bacillus is in the center, while the erobic spirochete is on the surface of the lesion. In pulmonary gangrene the odor is more fetid than the expectoration in bronchospirochetosis because of the lack of air. Smith[4] reports considerable work done on these organisms and has had success with the arsenicals in their treatment. We must not forget that this type of therapy may do considerable damage, by increasing the hemorrhage, even in small doses.

Mycotic infections should also be considered in differential diagnoses of lung pathology. They may be either primary or secondary infections of the lung tissue. It must be remembered that some of these invaders may live as saprophytes in the mouth, so that their presence must be duly investigated. It seems that most pathologists now classify actinomycosis under the general classification of streptothrix. According to Forbus[5], pulmonary sporothrichosis can be ruled out by its rarity.

The yeast infections such as blastomycosis, moniliosis and the more common moulds such as aspergillus, penicillium, and mucor might be diagnosed more frequently if sputum negative for tubercle bacilli were more often cultured. A smear stained with methylene blue or especially a fresh unstained specimen often helps to point to a diagnosis. The roentgenogram may simulate a tuberculous infiltration, particularly if it spreads from the hilar area. It may be isolated as a homogeneous cotton ball in the periphery of the lung parenchyma, or a nodular infiltration. Some of the more far advanced infections will present the most dense infiltration and fibrosis throughout both lungs.

A patient who had been carrying a mould infection for a period of seven years had just this type of infiltration. Iodides and arsenicals markedly improved the patient. He has since died due to spontaneous pneumo-thorax. To date the mould has not been classified. Another man sixty years old who was admitted to the hospital illustrates the group of short duration. He complained of shortness of breath, loss of appetite, and cough with scanty sputum production. Physical examination showed a few moist rales at the angle of the right scapula. A greatly enlarged heart complicated the picture so as to cause the physical examination alone to classify the patient as one suffering from cardiac disease. However, stereoscopic x-ray film showed a fan-like infiltration extending from the hilum into the mid zone of the right lung. Smears and cultures brought to light an aspergillus infection which cleared up with bed rest, proper nourishment and iodides in about six months' time.

Not infrequently a mould and tuberculous infection may exist simultaneously. This patient showed a cottony upper lobe lesion on the left, the size of a small orange at the periphery of the right upper lobe, at the time the patient was x-rayed, in 1924. Two years later tuberculosis of the left lung became arrested. The cotton ball in the right lung remained unchanged. In 1927 this patient, without warning, became slightly ill, with a rather copious green expectoration. The patient was put to bed, thinking that perhaps a reactivation of tuberculosis was in progress. His temperature did not run over 99.4 degrees, and his pulse was normal. Sputum was found to be negative for tubercle bacilli. Cultures showed such to be a mould infection. In two weeks the acute symptoms subsided and only a tablespoonful of pus was expectorated daily by the patient. This continued more or less for one year. It was controlled with periodic doses of creosote since iodides were not an advisable therapy. Vaccine therapy probably assisted. Serial x-ray examinations for over a period of about one year and a half showed gradual diminution in size of the homogeneous mass in the right lung. At the present time there is no indication of any infiltration in this area. Just how long this mass remained in the lung before breaking down is a matter of conjecture, but its estimated total time of existence is that it was probably dormant for three years or more, and active about one and a half years. The classification of this organism was probably monilia, a closely related variety, since we were unable to differentiate it further. It was non-virulent to a guinea pig.

A definite diagnosis of syphilis of the lung is rare, because we are never too sure of its presence. It may co-exist with pulmonary tuberculosis oftener than we think. Negative sputum for tubercle bacilli and a positive luetic reaction are prerequisites before a diagnosis can be made. The presence of other luetic findings, a negative sputum, and a positive Wassermann may be diagnosed in later adult life on top of a healed pulmonary tuberculosis. We should not err in calling these cases pulmonary syphilis. If the absence of tubercle bacilli has been ascertained, definite improvement in symptoms and chest findings with antiluetic treatment may cinch the diagnosis. One should be cautious in treating lues in the presence of an active pulmonary tuberculosis. The latter disease, in my opinion, should be given primary consideration.

Cancer of the lung does not complicate a diagnosis of tuberculosis very frequently. The few cases that are seen are usually the result of metastases from the breast, uterus, bone, stomach and liver. In these metastatic infiltrations the lung field is often mottled with small areas of increased density. In primary cancer of the lung, the x-ray findings generally show a dense area extended from the root of the lung into the lower half of the lung field almost to the periphery, dependent, of course, upon the extensiveness of the disease. Malignancy of lung tissue may simulate, during its course, a lung abscess, and a biopsy by means of the bronchoscope may be necessary for differentiation.

Foreign bodies, hemorrhagic infarction, mitral stenosis, and chronic inflammatory changes, such as interstitial pneumonia, are conditions which are to be kept in view when tuberculosis is ruled out of the picture. However, these conditions do not outrank the importance of bronchitis, bronchiectasis, lung abscess and the mycotic infections. To my mind varying degrees of bronchiectasis are more often called tuberculosis than any other non-tuberculous infection. To the contrary, no greater calamity can be thrust upon the patient than to repeat and treat a diagnosis of "grippe", "flu", asthma, laryngitis, bronchitis and even malaria in the presence of pulmonary tuberculosis.

For the patient to wait on a finding of tubercle bacilli as the only pathognomonic evidence of the disease often makes him a far advanced case of tuberculosis before the final diagnosis. At the same time in the disposition of any case with respiratory infection we must impress upon our patients that a snapshot diagnosis without a period of observation may in the end render him a great economic and health liability. Furthermore, it might be advantageous to the patient for the physician dealing with lung tissue pathology to have a non-tuberculous complex, and for other groups of specialists and the general practitioner to possess a tuberculous complex when dealing with any lung infection. It seems to me that patients would benefit from the resultant entanglement of the two complexes. In either case his health interests demand a true, not too prolonged, diagnosis, either at the expense of a physician with a tuberculous complex or the physician with a non-tuberculous perplex.

DISCUSSION

D. O. KEARBY, M.D. (Indianapolis): I cannot discuss non-tuberculous conditions of the lung, but I just want to add one observation I have made in doing bronchoscopy on various cases at the University Hospital. In a recent report from a tuberculosis sanatorium it was stated that in sixty percent of their obstructive lung conditions Vincent's organism was isolated. In our experience in the University hospitals here, the bronchoscopic method of obtaining smears showed that the predominant organism in the lung has been the streptococcus viridans.

JAMES H. STYGALL, M.D. (Indianapolis): There are many of these cases of non-tuberculous lung conditions that are carried along and treated as tuberculosis for a long period of time, particularly bronchiectasis, as Dr. Crimm has stated. We hear so much about Vincent's organism being the predominating organism, but my experience has been the same as Dr. Kearby's, that Vincent's may be found occasionally—of course we find it a great deal in the mouth of the normal individual—but I am not convinced that these cases are usually due to Vincent's organism. However, in lung abscess we do give several injections of bismuth and neosalvarsan in moderate doses, thinking perhaps we have a spirochete infection.

Bronchiectasis is frequently undiagnosed, and in a patient who gives a history of cough with expectoration, particularly in the winter time, over a period of years, if the nutrition is pretty good and there is a persistent negative sputum, we can almost make a diagnosis on the history. The x-ray or physical examination will not make the diagnosis in these cases. We have to use lipiodol and the x-ray in order to map out these lesions.

We have had a great many of these cases at the Riley Hospital, and of course the bronchiectasis after it is once developed is a hard thing to treat. I feel more and more that in childhood is the time to get after these things. A bronchiectasis starting after a sinusitis, or bronchitis, or pneumonia, could be prevented if the child is treated vigorously at that time. Get the sinuses cleaned up and bring up the nutrition. After the bronchiectasis is well established I think it is worse than tuberculosis because we cannot do anything for the patient. We should start in early on these cases, particularly children. Bronchoscopic treatment, even in children, will help to clear up these conditions that otherwise would continue for years. Much can be done for them in the early stages.

H. M. BAKER, M.D. (Evansville): Dr. Kearby and Dr. Stygall have both called attention to the fact that in so many of their examinations where they possibly expected to find the spirochete they did not find it. I would like to remind the gentlemen that the fusiform spirochete is very sensitive to thermal change, and that the smears from these cases should be kept warm. In one very large clinic where this fact was brought out the percentage of cases in which the fusiform spirochetal organism was found suddenly jumped from ten percent to sixty-five percent. I think it is well to bear in mind in searching for this organism in cases of bronchiectasis or abscess that the organism is extremely sensitive to thermal changes and if the smear is chilled it is difficult to find it. I am sure if that point in the technique is borne in mind the percentage of cases in which the organism will be found will increase rather sharply.

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PRESENT STATUS OF BURN THERAPY*

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Burns may occur from the effects of hot air, hot liquids or steam, exposure to the sunlight and to ultraviolet light, from acids, alkalies, electricity, roentgen rays, radium, caustic substances of various kinds and irritant gases. In this country it is customary to classify burns into three classes according to the depth: first degree, erythemia; second degree, vessicle formation, and third degree, partial or complete involvement of the skin or underlying structures. In England and France it is usual to divide burns into the six degrees of Duprytren's classification, namely: first degree, superficial congestion; second degree, Bleb formation; third degree, destruction of cuticle with exposure of the nerve terminals—the most painful form of burns; fourth degree, the whole thickness of the skin is destroyed; fifth degree, the muscles are encroached upon; sixth degree, the entire limb is involved.

In reviewing the literature most writers consider the extent of a burn more important than the depth. There seems to be something especially harmful in a superficial burn. All burns of the first degree are fatal if two-thirds of the body surface is involved. All burns of the second degree are fatal in adults if one-third of the body surface is involved and in children if one-seventh of the body is involved. All burns involving one-third of the body surface are extremely serious if not eminently fatal. All burns involving one-tenth of the body surface should be considered serious. In estimating the percentage of the surface involved the lower extremities, including the buttocks, compile forty percent of the body surface;

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the trunk, including the neck, forty percent; the upper extremities, twenty percent; the head, six percent.

The reports from the Metropolitan Life Insurance Company reveal forty-five percent of the deaths from burns occur during the period from birth to the fifth year. In general burns in children and infants are more serious than in adults. The Department of Commerce reports that sixty-two percent of the children's burns resulted from someone leaving a pail of hot water unprotected, the filling of a bathtub with hot water and the child falling into it, or due to a child pulling a kettle of hot water, soup, etc., from the stove and the contents spilling on the child. This shows sixty percent of the mortality and morbidity of burns in children is preventable and due to negligence and carelessness. Twenty-five percent of the burns in children resulted from children playing with matches or around a bonfire. Only thirteen percent of the burns in children were caused in various ways in which the child and parent had no control.

The profound metabolic disturbances following a severe cutaneous burn has been the subject of extensive laboratory and clinical investigation. While as yet there has been presented no single theory which satisfactorily explains all of the observed changes following the primary burn, several more or less reasonable theories have been advanced. Of these, three may be discussed briefly. The reaction of the body to a burn strongly resembles the clinical state described by the term toxemia, which implies the presence in the circulation of some toxic agent. The more serious cases usually present early in the course a clinical picture commonly described by such terms as shock or exhaustion. There is a profound disturbance of the heat-regulating mechanism and in all probability equally serious interference with many other functions of the body. The theories which have been evolved to explain the phenomena of symptoms following burns may be arranged logically into the following groups: first, those in which interference with a normal function of the skin is considered to be the essential factor in the causation of the phenomena; second, those in which the effects observed are attributed to changes in the blood resulting in altered function; third, those in which the picture is explained on the basis of absorption of a toxic substance in the blood stream[1]. Commenting on the theories of *interference with normal function of the skin,* many of the older writers have laid great stress upon the disturbance of one or another of the various functions of the skin, namely, respiration, excretion, temperature regulation and sensation. These have been made the basis of theories explaining the clinical course which follows extensive burns. I shall not go into detail as to the data that have been presented to support the above theory as the more recent writers are pretty well agreed that they may be a contributing factor but in themselves do not adequately explain the sequence of events which take place.

Others have attempted to explain the phenomena of symptoms on the basis of over-heating of the blood, such as destruction of red cells by heat, degeneration of the blood, inability to take up oxygen, stasis in the large bowels and extensive thrombosis. These again, according to Davidson of Detroit, may be considered contributing factors but do not explain the body reaction.

The Toxemia Theory. According to Davidson there is certain convincing evidence that suggests the formation at the site of the burn of a toxic substance the absorption of which is responsible for the constitutional reaction. Some worker has succeeded in isolating from the urine of a burn patient a substance which was toxic to animals. When parabiosis was established between two animals and one was burned the other showed evidence of toxemia. Another experiment showed that toxemia did not develop in the unburned animal when it was separated from the burned animal for twelve hours but that both animals finally died from toxemia when left united. As to the post-mortem findings, degenerative changes in the liver, spleen, kidneys and bone marrow were found in a series of fatal cases. There was also noted a general edema of the lymphoid tissues. The adrenal glands weigh from three to five times the normal and the adrenalin content is absent or low.

One observer has reported that death may be divided into two stages: one, the initial stage, which is due to shock and which is accompanied by high blood sugar content due to hyperactivity of the adrenals; and the secondary stage, which is due to degenerative changes, particularly in the adrenals. Other pathologists report in extensive superficial burns that the blood becomes highly concentrated. Davidson reports a lowering of the blood plasma which is in proportion to the amount of tissue devitalized and which is present as long as sloughs are present.

On account of the concentration of the blood it requires the copious administration of fluids by all avenues and because of the lowering of the chlorides sodium chloride administration has become routine. Other pathologic findings show that in about five percent of fatal cases there is an ulceration of the gastro-intestine, the usual location being in the duodenum. The first reported autopsies by William Cummins published in 1823 gives as the chief lesion in the early cases of death hyperemia of the thoracic and abdominal organs, and in cases in which death was delayed several days a well-marked inflammatory reaction. Another reports that the lymph glands of children were similar to the lymph glands of children who die of acute infection such as diphtheria in which it is known that a toxemia is present in the circulating blood. Many writers have written regarding the finding of a toxic agent in the urine having the properties of pyridine though they do not

agree as to the exact identity of the toxic substance present.

Of the various theories presented, therefore, that which attributes the constitutional reaction to absorption of some toxic substance from the burned area is most strongly supported by the available evidence.

The problem that presents itself in the treatment of burns falls into the following groups: first, the immediate or emergency treatment; second, the treatment of the shock and toxemia; third, the treatment for replacing lost tissue; fourth, the prevention and repair of contractures.

No. 1—Except in burns involving small area of skin all cases should receive hospital care. When the patient is taken to the hospital he should be placed immediately in a warm room and all clothing removed. The primary shock in extensive burns is similar to any surgical shock. There is blunted sensibility, cold, moist skin, subnormal rectal temperature, irregular falling respirations, rapid, thready pulse and a very low blood pressure. Morphine is given in doses adequate to control pain. External heat is applied and fluids are pushed, using hypodermoclysis and proctoclysis. Great care is used in the removal of the clothing as this procedure is ofttimes very shocking. Early blood transfusions have been rather extensively tried. Most writers agree that they can see no advantage of it over injections of glucose and saline solution. Davidson in his writings states that he transfuses on admission any patient with a possible fatal burn. This he advises before the onset of shock. If shock develops the transfusion is repeated not less than twenty-four hours. Other workers have proposed the rather heroic exsanguination transfusion in which the patient is bled thoroughly before the transfusion. The patient must be kept warm yet the area of skin involved should not be covered. The necessary temperature may be obtained by the use of various electrical appliances such as lamps, etc. If stimulants are needed caffeine in from one to three grains dosage is given every one or two hours. The administration of fluid, preferably five percent glucose in normal saline, is the best method of combatting the toxemia and shock. It is good practice to give the first fluid intravenously. The fluid increases the blood volume, decreases the toxemia and brings available energy to the body. Normal saline solution is also administered by rectum. The patient is encouraged to drink water freely.

Accepting the toxemia theory as the most plausible explanation for the body reaction the rational manner of combatting the toxemia would be some form of local treatment which would prevent absorption of the products of protein decomposition from the site of burn. This might be accomplished by the removal of decomposition mechanically or by baths, by slowing the process of absorption, by the use of vaso-constrictor drugs, and third by causing a local coagulation of all devitalized tissues. According to many writers there is a great deal of evidence in favor of removing as much of the devitalized tissue as possible in an effort to combat toxemia. Some have even advised to use a general anesthetic or large doses of morphine and then wash the bleeding surface with gasoline. The use of these measures is advocated after the primary period of collapse. It is evident that there are borderline cases in which the vitality of the patient might be taxed to such a degree that an otherwise favorable prognosis might be converted into a fatal case. A number of observers have attempted to obtain the same results by continuous baths. Others have advised as a vaso-constrictor adrenalin in a dilution of one to ten thousands. In the local treatment of burns it is to be remembered that a burn is a wound and the usual antiseptic and aseptic precautions which pertain to all wounds apply to burns. Strong antiseptics are to be avoided. Picric acid lessens pain in a one percent solution, but poison cases have been reported. An ointment containing butesin and picric acid is very soothing but the writer has seen dermatitis follow its use. The administration of antitetanic serum may be considered in cases which may have been contaminated by dirt after the burn. Numerous applications have been devised whose primary purpose is to allay pain. Carron oil, equal parts of lime water and linseed oil, but this is usually stale and contaminated. Ambreen is a French preparation of secret formula but constituted chiefly of paraffin and oil of amber. Sherman of Pittsburgh has treated three thousand cases by the paraffin method and believes it very efficient. The patient is free from pain after the first twenty-four hours in most cases. There is more rapid epithelization in surface burns under paraffin and the scar formation is thought to be less. Sherman emphasizes that paraffin should never be used in a wound harboring necrotic tissue. The wound should first be debridged and, according to Sherman, dried. The paraffin is then applied by spray or brush. The burn is dressed every day.

In about 1925 Davidson of Detroit while investigating the use of phosphotungstic acid as a coagulant was advised by Dr. Mason of the similarity of tannic acid and phosphotungstic acid in regard to the property of precipitating protein. Tannic acid is an amorphous powder which is readily soluble in water, glycerine and alcohol, insoluble in ether and chloroform. It precipitates protein. It forms a more or less stable compound with the protein constituents of the body fluid and cells. When applied to a burn surface in dilute solution further penetration into the deeper lying protoplasms is apparently prevented by this action and the true astringent effect appears to be limited exclusively to the most superficial layers of tissue. The precipitated proteins in the surface treated provide a protective coating against chemical, bacterial and mechanical action as well as against sensory and inflammatory irritation. It was evidence to Dr. Davidson that it might be efficacious

in precipitating the poisonous materials in burned tissue and thereby in preventing their absorption. While picric acid has some properties in common with tannic acid it is more toxic and takes a stronger solution to act as a coagulant.

The method of procedure of using tannic acid: As soon as the patient is seen he is given a rather large dose of morphine hypodermically to alleviate the intense pain. A two and one-half percent fresh aqueous solution of tannic acid may be used as a spray over the burned area. If used as a spray it should be sprayed on every twenty or thirty minutes until the burned tissue assumes a tan brown color and coagulation takes place, which usually occurs in eighteen to twenty-four hours. As blisters appear they are punctured so as allow the escape of fluid and tanning of the tissue. The tannic acid not only diminishes the absorption of the toxins but the pain is much decreased in a few hours' time. Another method is to cover with dry sterile gauze pads the burned area and then soak with a two and one-half percent aqueous solution of tannic acid. It is essential that tannic acid solution be made up fresh just before its use. As soon as the part is found to have assumed a light brown color all dressings are removed. In order to facilitate the removal of the dressings without pain it has been found desirable to wet the gauze with fresh tannic acid solution. The wound is thereafter left exposed to the air but is carefully protected from chemical injury, chilling and bacterial invasion by a suitable cradle draped with sterile linen. A convenient way of supplying artificial heat is by means of an ordinary electric light bulb within the cradle. Five percent tannic acid ointment may be used about the eyes.

In 1929 I had the pleasure of hearing Dr. Davidson's discussion at the Detroit meeting of the Interstate Postgraduate Medical Association in which he showed many screen pictures illustrating the various stages of burns under treatment with tannic acid. Since that time I have had occasion to treat eighteen severe cases of burns with the tannic acid treatment. Three of these cases were children. There was one fatal case due to very extensive burn, more than one-half of the body having been burned. I will report one case which is interesting because it was rather typical of the way the burns react following this treatment.

A male, aged thirty-eight, was admitted to the hospital July 21st for the treatment of burns resulting from falling into a tank of boiling water. Patient was in severe pain. There was second degree burns of the left leg involving the buttock, entire thigh and knee. From the knee to the ankle there was a continuous third degree burn. The entire left foot showed second degree burns. On the right side there was a second degree burn of the foot. The inner aspect of the right thigh showed a second degree burn. Ten percent of the total burned surface was burned to a third degree, twelve percent to the second degree and about twenty percent to the third degree, making a total of forty-two percent of the surface area. The urine contained sugar but no albumin. The entire burned area was sprayed with two and one-half percent aqueous solution of tannic acid. Fluids were forced to about ten thousand cubic centimeters daily, most of which was taken by mouth. There was some nausea and vomiting. The highest temperature was 102.6. The burns were a light brown color and dry. They were dressed with aqueous solution of tannic acid. Seven days later the edges of the coagulated surface began to separate. Each day the loose edges were trimmed away. The granulating area showed some slight amount of exudate present. On account of the slowness of the separation and development of a 102 temperature the left foot and leg were dressed in a Dakin's compress two weeks after the initial burn while the remainder of the body was left exposed. After two days there was prompt separation of the coagulated tissue except over the area burned to the third degree. On August 7th the knee to the foot was placed in a Dakin's dressing. On August 14th, three weeks after the dressing, the burns were exposed continuously to air. Healing then went on uninterrupted. On August 18th pinch graft was done, covering the posterior aspect of the lower leg and on August 29th the remaining areas were grafted. Patient was discharged on September 29th, at which time all the lesions were healed.

In the series of cases which have come under my observation treated consistently with tannic acid solution the toxemia was markedly less than cases treated otherwise. The evidence of the reduction in the toxemia; the clinical behavior of the patient; the low temperature curve and the low mortality rate from the primary toxemia was evident. While there was evidence of infection in two cases they were not severe and saline or Dakin's solution reduced the temperature to normal in two days. Again, in the cases treated by tannic acid the lessening of pain was very striking, some of the patients complaining of a burning sensation at the beginning but were usually relieved in a half hour after the application of the tannic acid and no further pain was experienced. Narcotics rarely have been used after the first administration. There was a marked diminution in the amount of scarring perhaps due to a decrease of infection, decrease in the amount of irregular granulation and the superficial crust which probably acts as a bridge for the spread of epithelium over the burned area. In most cases there was a clean, dry surface. There is in some cases some exudate which in most instances does not need to be removed, and if no application such as boric acid be applied to soften these crusts the epithelium will grow rapidly under the crusts. In the rather small series of cases coming under observation one is impressed first with the fact that there is less toxemia; that wet dressings, particularly boric acid,

will cause a return of toxic symptoms; that tannic acid is an analgesic; that the best results are obtained by not using vaseline dressings prior to the tannic acid; that the open air method causes less toxemia and produces a general comfort. There is evidently a prevention of loss of body fluid. Secondary infection is lessened greatly. Scar formation is less marked. The protective layer of the coagulated protein forms a crust and young epithelium forms over the denuded area.

Discussion

A. G. Schlieker, M.D. (East Chicago): There are a few points I should like to stress, for instance first-aid. The men who do industrial surgery should advise the first-aid man not to use grease. Tannic acid does not work so well if grease is used. The tannic acid, as the essayist states, acts as an analgesic and obviates the necessity of using a great deal of analgesic, although some must be used at first. The common dosage is two and one-half percent. We find, however, that five percent acts much better, although it causes some little distress to begin with, but if the patient is very severely burned you find after the first application that the burning is not so severe with the five percent. We should advise the plant man to have tannic acid on hand to make the solution. You can apply it with gauze if necessary.

We find there is quite a discussion and difference of opinion perhaps as to the cause of the shock, and yet I do not know that it matters so much what causes it. We must take care of the shock, and it is done perhaps better by means of fluids. The theory seems to be that a severe burn through the epithelial system affects the adrenals; that there is an increase of sugar in the blood and a consequent over-stimulation of the adrenals to begin with, which finally results in lack of function of the adrenals. And I have thought recently, since Swingle and Pfiffner of New York have used the cortical hormone for Addison's disease, and we have the same thing here practically for a short time, that it is possible a stimulant of this kind might be used for a short time to combat the extreme shock we see in many of these cases.

The principal point I think is the amount of fluid to be used. We find the lack of fluid is enormous. If one-sixth of the body is burned there can be a loss of seventy percent of the body fluids, and as twenty percent loss of fluids results in death, we can see the necessity of increasing the body fluids by any means possible.

As to the other effects of tannic acid, we find it is not necessary to do as complete debridement as would be necessary otherwise.

One thing has not been touched upon, and that is the x-ray burn. Having had personal experience, I would like to speak of the burns by x-ray. I was unfortunate enough to have the backs of my hands burned with the x-ray, and that does not respond to treatment ordinarily given to burns. After suffering for five weeks I applied to an x-ray man and he advised me to use lime-water. I used lime-water and the pain ceased instantly. I give you that for what it is worth. The x-ray burn seems to cause a very acid condition.

C. C. Robinson, M.D. (closing): Dr. W. D. Little of Indianapolis has summarized very concisely the advantages of the treatment of burns with tannic acid. The following are some of the points emphasized by him:

Tannic acid combines with burned tissue to harden it.

It converts wet gangrene into dry gangrene.

It reduces the absorption of split protein products and diminishes toxemia.

It prevents enormous loss of fluids by conversion into dry gangrene and may eliminate infection.

The danger of subsequent sepsis is minimized.

Tanned membrane acts as a splint to under destroyed epithelium.

If all epithelium has been destroyed serum lifts up the tanned membrane.

By this treatment sloughed tissue harboring infection is not present.

The granulations are cleaner and skin grafting can be done earlier.

It adds comfort to the patient and the death rate is decreased.

THE FUTURE OF SURGERY*

H. H. Martin, M.D.
LAPORTE

Our visualization of the future is based largely upon a knowledge of what has transpired in the past. In order to present more clearly my subject, "Surgery of the Future", let us review very briefly the surgical happenings of the past three-quarters of a century.

In a public park in one of our midwest cities there has been erected a life likeness, in bronze, of one of our pioneer physicians, on the base of which an inscription reads, "A Forward Looking Man".

The man so honored began his professional activities at a time when ether was first being demonstrated as an anesthetic in the Massachusetts General Hospital. Not a single micro-organism had been named or associated as a possible cause of any disease.

This man, with his associate, Dr. Herrick, visited LaPorte in the early fifties of the last century, hoping to reopen the LaPorte Medical College. Upon their arrival they found the main building had recently burned.

This was at least six years before the bacillus anthracis had been isolated and suggested as a possible cause of the disease anthrax. Pasteur was just beginning his interesting and painstaking scientific investigations which were eventually to

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make possible the surgical achievements of the following three-quarters of a century.

These men were both students of one of the LaPorte Medical College professors, a Dr. Deming, who no doubt had much to do with their coming to LaPorte, as well as in shaping their future careers.

Not being able to carry out their original plans, Dr. Herrick proceeded to Chicago, then a small but rapidly growing commercial city, where he soon became associated with Rush Medical College. A son in due time became Dr. Herrick the 2nd, professor of medicine at Rush, and *his* son in turn became Dr. Herrick the 3rd, also of Rush, and known to most of us for his research work on streptococcus viridans as the outstanding offending micro-organism causing endocarditis.

The subject of this sketch, W. W. Mayo, decided to cast his fortune in the undeveloped northwest, and proceeded to the head of navigation on the Mississippi River.

Iron ore had recently been discovered in northeastern Minnesota, on the shores of Lake Superior. This doctor was selected as chief medical adviser to a party sent to survey and map a city which is now known as Duluth. After accomplishing their mission, the doctor with a few other members of the organization attempted to return to Minneapolis through an unmarked wilderness. The party became lost and the food supply exhausted. However, by following the leadership of this "forward looking man", all eventually reached their destination.

At the beginning of the Civil War, Dr. Mayo offered his services to his state, and was made medical supervisor of enlistments at Rochester, Minnesota, then a small pioneer prairie village.

After hostilities ceased and his military services were no longer required, he decided to make this village his future home, and continued to develop a medical practice. In that community, this pioneer physician filled the capacity of medical adviser; he was surgeon, family physician, family counselor; he treated their colds, their typhoid, fitted glasses, pulled teeth, got their babies—in fact did all that could be required of a physician at that time.

In a few years a son, who had really been his father's assistant for a number of years, graduated in medicine and he too became a general practitioner. Within a year or two another son graduated in medicine and also became a general practitioner, associated with his father and older brother.

It was not until 1892 that Pfluger first associ- and two sons that made possible the development of the greatest medical center of all times. This "forward-looking" pioneer physician was not merely a looker-on—he was an active participant in medical and surgical progress.

During the late eighties and early nineties of the last century, asepsis and antisepsis was perfected to such a degree that surgery became reasonably safe. Dr. J. B. Murphy was carrying on his research activities in connection with the peritoneal cavity. The appendix was located and proved to be the great offender in the belly.

At the A. M. A. meeting held in Chicago in 1893, Murphy was able to report the result of his investigations, as well as the removal of considerably over 300 appendices.

The ovaries, for centuries, had been looked upon as the causative factor in all functional neuroses, as well as other mental disturbances in women. Now that the abdomen could be opened with safety, the remedy became easy—remove the ovaries.

It was not until 1892 that Pfluger first associated the menstrual function as being intimately associated with the ovary and not until 1899 that Knauer* was able to establish the fact that the influence of the ovary is a blood-born one of an endocrine nature. The full function of the ovary is as yet not known, but the surgeon now respects its identity and seldom mutilates it without just cause.

Early in the present century, Billings and Rosenow published their observations and the results of their research on foci of infection, and Billings regained his health and former vigor after submitting to the draining of his gall bladder. The profession, as a whole, was not slow in accepting their conclusions. Immediately the search began for foci of infection and has continued until the poor patient in whom nothing is found that can be removed is a medical curiosity.

In the meantime, hospitals, big and little, and *all expensive*, have been increased a hundred-fold. A hospital now not equipped with its expensive battery of operating rooms is just not a hospital. Statistics show that the fourteen largest hospitals in the state of Indiana recognized by the American Medical Association as being suitable for the training of interns have listed 519 surgical beds as against 267 beds reserved for medical cases.

It is indeed a misfortune that there are no reliable statistics that give even a remote idea of the number of operations performed, or final results obtained. In 1928 the government issued a bulletin in which it was stated that one-third of the operations performed in the United States since 1924 were for the removal of tonsils. At about that same period I became interested in the value of tonsillectomies in the prevention of the so-called "rheumatic heart" and other allied infections. Through personal communications to several of the larger general hospitals in the larger cities where reliable follow-up statistics were dependable, I found that in but one, the Boston City Hospital, were they satisfied that tonsillectomies had proved to be of value in preventing these serious complications. (Personal letter from Colonel Roby.)

Cunningham says (April, 1931, issue *Archives*

*"The Biologic Significance of the Female Reproductive Cycle." —*Journal of A. M. A.*, June 27, 1931.

of Internal Med.): "That there is a growing tendency to question the value of tonsillectomy as a prophylaxis against infectious diseases and as a preventive measure—*or cure*—for such systemic diseases as rheumatism, chorea and carditis."

The mortality rate for appendicitis has not improved in twenty-five years. Not infrequently we examine patients who have submitted to from three to nine abdominal operations.

The death rate from cancer is steadily increasing. Regardless of the surgeons' efforts, man is living no longer today than he was fifty years ago. The span of life during this same period of time has lengthened thirteen years, but only as a result of saving the lives of infants.

The present zeal for surgery may be attributed, in part, to the period in which we are living.

Much less than a hundred years ago those subjected to surgery reached the zenith of all tragedy. Today it is rather a benign procedure; expensive, if one has the money to pay for it and all its accompanying frills; if they do not, the public pays. However, for one in either class not to be able to refer to *my operation* is to be rather out of cast.

Fifty years ago there were approximately 150 medical schools in the United States. Three-fourths of the professors and instructors were general practitioners who were more proficient in some special field than in others. Today every chair in our medical colleges is filled by a specialist. Do these specialists have any real incentive to train a medical student for the real practice of medicine, or is the student being trained to enter some special field? This is a question, not a criticism.

I believe the highest medical accomplishment today is to be a real family doctor, one who is familiar with, and can apply, all of the more ordinary aids in making a diagnosis, the stethoscope, ophthalmoscope, laryngoscope, proctoscope, read x-ray films, etc., with at least ordinary skill. But, first, our medical colleges must become educators of general practitioners, not specialists. A specialist should be one especially trained in a specific limited field but not until he has served sufficiently long, either as a general practitioner himself, or has assisted another general practitioner. As I have observed the reaction of the public and the hospitals, the public as a rule selects a man who looks after most of their medical and surgical welfare. The man who gets the babies, counsels the mothers, takes out the tonsils, and the appendices, examines their eyes, fits glasses—in fact does all in a family practice, except when requested to call counsel. The hospital caters to such men because they are the hospitals' best feeders.

In this connection I take the privilege of reading the following excerpt from an editorial in the Fourth of July issue of the *Saturday Evening Post* of this year:

"Despite all that has been written and said about the family doctor, his patients have still to be heard from. General practitioners and specialists, surgeons and psychiatrists, all have had their say at medical association meetings and in such interesting articles as that of Dr. Winford H. Smith's in the May 16th issue of the *Saturday Evening Post,* but the people who pay the bills have not had their day in court. On such a complex and baffling subject, presenting so many angles of approach, it is difficult to find a common point of view. More and more it becomes apparent, however, that one of the factors driving out the family physician is his own inability to keep up with the times. His patients say that, except for minor ills, he turns them over to specialists. He is becoming partly an diagnostician and partly a directory of his specialist friends—an expert information bureau. Is it any wonder, his patients rise to inquire, that he doesn't make enough money to go on being a general practitioner? Perhaps, to relieve economic pressure, he practices fee splitting that ethical bone medical men have long been wrangling over. Or else he turns specialist himself, and another family doctor is gone.

"There are, however, general physicians who make money, who perform all but the most delicate and specialized operations, who put to its fullest use their intimate knowledge of their patients' idiosyncrasies. That, after all, is why none of the suggested substitutes for the family doctor will ever fill the bill. That is why neither 'group practice', government agencies, nor the out-patient clinics of private hospitals will ever force him to take down his shingle. For the practice of medicine is partly an art, not entirely a science. A successful general practice requires a man with what one doctor called 'the shepherd's heart'.

"But if he is to make the good living he deserves, he must keep up with medical progress sufficiently to do the hard jobs that earn the big money. These family physicians who volunteer to perform the indicated operation, to deliver the baby, to treat the sinus, and whose patients are confident of their ability—these are the prosperous family doctors of the future. Like any business, success in medicine demands constant work, apart from regular routine. It is not surprising or alarming that the doctor who hasn't 'cracked a book' since medical school can't seem to stand the competition of clinics, specialists, and hospitals. On that principle he wouldn't make a good living as a lawyer, an engineer or even a candlestick maker. But as long as progressive, prosperous general physicians carry on their abundant practices in every section of the country, we need not fear for the future of a great American institution."

This plainly and truthfully spoken editorial puts the proposition squarely up to the medical profession and especially up to the family doctor.

Medical activities for the past thirty-five years have in the main been directed along lines of

disease prevention and surgical intervention. Surgical intervention is instituted, or should be, as a corrective measure, or to remove pathology, which does or may menace health or life.

Vasomotor disturbances, encountered every day of a physician's active life, the cause of which is as yet but little understood, many times result in pathology demanding surgical intervention. Arteritis obliterans, scleroderma, and who knows but what gastric and duodenal ulcers are, primarily, results of vasomotor disturbances in those organs.

While many experimenters have been able to produce artificially peptic ulcers in animals, yet none has the same general characteristics of the ulcer as it develops in man. The outstanding characteristics of every peptic ulcer of recent origin examined by many pathologists has been the evidence of clotted blood in the minute vessels of circulation at the site of the ulcer. Is it not reasonable to suppose that such changes may be the result of vasomotor disturbances?

And again, what part are the emotions playing as an indirect etiological factor in the development of surgical pathology? If the play of emotions is an active factor in the increase of blood pressure of from twenty to eighty points, and this repeated many times every twenty-four hours, may it not be the primary cause of so-called essential hypertension, which may, and frequently does, terminate in malignant hypertension, which sooner or later results in pathological tragedy.

The real family doctor, the one who meets the requirements of the quoted editorial, the one who not only knows his patient but knows the patient's ma and pa as well, will, by preventing the development of pathology, save many from surgical operations.

At this time surgical procedures are well standardized; surgical technique is a personal equation; real surgeons are born, not made. The mauler and traumatizer of tissues should not attempt surgery, but should confine his medical activities to those pursuits best adapted to his qualifications. Surgical judgment develops only with training and experience.

The early manifestations of stress, if recognized and controlled, will prevent the development of conditions today being recognized as surgical. (Lantern slides were used to demonstrate this part of the message.)

We may be able to train specialists, nurses and lay organizations to take over most of the family doctor's other activities, but this one field will forever remain his, provided he is enough alive to his responsibilities and opportunities to grasp them.

To the recent and coming graduate of medicine, may I be privileged to say—Go forth in all thy glory. Thus far your path has been hard, tedious and long. You have met all legal and ethical requirements. You are entering one of the oldest and most highly respected professions; play the game hard, but play it fair. Observe the rules and practices set forth by the profession in your adopted community; do not keep your offices open when others are closed; you may gain a patient, but you will lose the respect of the better element of your profession. Be a general practitioner of medicine first, and, if in later years you do choose a specialty, aim for membership in the highest organization of your chosen field.

To succeed in medicine you must have the ability to work with others. This is a natural gift to some, others must develop it. Your hours will be long and often tedious. Learn to read while you work. Be determined from the first that each year you will spend some time bettering your own intellectual outlook. If you are serving the public and serving it well, finance will take care of itself.

To the older men of the profession, may I say —welcome these young men with extended hand and an open mind. If they prove themselves worthy, help to train them, that they may sooner become an honor to our profession. Thus will we cope with any and all antagonistic forces, and prove to the world that our profession is the noblest of all.

Summary

1. The evolutionary development of surgery during the past forty years has been so rapid and so dramatic that it has failed to find a stabilizing plane.
2. Personal enthusiasm has led to many needless operations.
3. The profession of the future must labor as conscientiously in the prevention of the development of pathological conditions demanding surgical interference, as it has labored in the past, for the prevention of diseases, contagious and infectious.
4. From statistical evidence available it appears that far too many tonsils are now being sacrificed.
5. The high cost of medical service is very largely due to the very rapid development of surgery.
6. The family doctor by knowing his patient is best qualified to direct his physical and mental welfare.
7. The specialist, as the result of insufficient training along general lines, not infrequently fails to comprehend the patient as a living entity, and disaster results.
8. A fuller comprehension of their responsibility by those responsible for the training and developing of the medical doctor of the future will in no small way eliminate many of the medical ills of today.
9. Surgery of the future, outside of the larger medical centers, will be very largely in the hands of the general practitioner.

Discussion

F. H. Jett, M.D. (Terre Haute): When I first went into a hospital for training, I wanted to be an internal man, which is a glorified name for a

general practitioner who makes his patients pay for services rendered. When my chiefs looked me over they told me that I might make a surgeon but never an internal man, so my service was changed.

Dr. Martin's paper reminds us anew that we have had many men in our community who deserve much credit in the making of modern medicine. Medicine did not happen by chance, but was developed by those wise, farseeing men after much thought and effort. The wisdom of what they did is obvious today. We must realize that this is just as much our problem now as it was theirs in their time. The future of medicine will depend wholly upon the wisdom of the medical profession today. We need leaders more now than ever before because the field of medicine is much broader and more complicated. Our country is losing its babyhood and changing from a land of endless natural resources. We are more and more approaching the position of Europe. The mechanical age is throwing out enormous numbers of people above middle age simply because they are unable to stand the speed of the machine. Long ago the medical profession took the responsibility to see that everyone received medical care. Whether they should have done this or not is another question. Today it is absolutely expected of us, and this must be considered in any plan that we have for future medicine. It is well known to you that every manufacturer, merchant, in fact, every successful man, wants to have his name written on a brass plate. He thinks that the surest way to do this is to give, in some manner, free medical treatment. This is also a pet way that our political solons use to get votes, which means socialism in medicine under a republican form of government. We must in some way take care of our own charity and not let it be dictated to us by well-meaning people, hospitals, state clinics, etc., or state treatment bodies under any health name.

Dr. Martin seems to take issue about the necessity or the position of a specialist. In the year 1930 there were published more than 200,000 medical articles. This does not include books. If we consider that one-seventh of these interested the surgeon, and he was to read twelve hours a day and twenty minutes to the paper, it would take him the entire year to read these articles. There was a time when an automobile was built in a blacksmith shop. We all know how foolish this would be today. The surgeon today, if he does his work properly, must be backed by a trained internal man, a trained anesthetist, a trained assistant, a trained pathologist, a trained roentgenologist, and also the armamentarium to do a complete work-up. This is what I consider makes him a specialist. I might add to this the surgeon is fortunate who has high-class general practitioners as his consultants. We have consultants who give us a high mortality and we have consultants who give us a low mortality. Dr. Martin takes us to task for several things that, on the face, seem to indicate that the practice of medicine is not progressing. He states that the "span of life is not increased". This is not the fault of the medical profession. Numberless persons are alive today for no other reason than well-directed medical and surgical treatment. The stress of life and modern conditions are simply balancing our progress.

"Is cancer increased?" Is it, or, as the doctor has said, are we now bringing more people to the cancer age by decreasing the mortality in the young? However it may be, neither the general practitioner nor the surgeon is responsible for it. We are simply challenged to produce a prevention or a cure. We might say in passing that society has not been successful in finding a cure for war.

"Appendix mortality not improved." This certainly is not the fault of the surgeon. There is an unwritten law that the surgeon never goes to bed with an acute appendicitis case in his care. Thirty-six hour cases give practically no mortality. Diagnosis is difficult in young children, and also in adults above thirty-five. These cases account for much of the mortality. *The Spectator,* an insurance publication, gave the mortality from appendicitis for—

Lexington, Ky.	59	per 100,000
Sioux City, Ia.	54	" "
Little Rock, Ark.	51	" "
Troy, N. Y.	5.5	" "
Newport, R. I.	7.3	" "
Galveston, Tex.	7.5	" "

These cities compared to each other in size, although for some reason the mortality in the first three was nearly eight times the mortality of the last three. I would like to emphasize that there is no prognosis as to the outcome of a given case of appendicitis. There is no treatment other than operation. The mortality has been reduced by operating upon cases of appendicitis. This is certain, but there is much to be desired in education and early diagnosis. It is well to remember that little children and people above thirty-five have appendicitis more frequently than is generally supposed, and that the signs and symptoms are not frank, as they are between twelve and twenty-five.

I agree perfectly that the general practitioner is the "salt" of the medical profession, and that the surgeon is an ally, tool, or machine—if you will—to pull him out of obscure, technical, difficult or dangerous situations which are sure to be his lot. I am sure that Dr. Martin did not want you to understand from his paper that he expects the general practitioner to be an adept in the use of perimeter, slit-lamp, electrocardiograph, metabolism, cystoscope, dark field, frozen section, microscope, diagnostic x-ray, deep therapy, radium, nerve block, surgical dissection, and many other technical procedures. Also I feel that he does intend to convey that the surgeon can justify his name in no other way than by wide reading, training, and experience. An operation may be thought to be minor, but before it is ended gives us enough

"thrills" to keep us awake for a week. To apply the situation to myself, if I am sick with eighty percent of the ills that we are heir to, I want the general practitioner to take care of me and to direct a well-trained nurse, but in the other twenty percent, I must confess that I will get in a boat with the specialist, as bad as he is, and even if his boat does sink at times.

H. H. MARTIN, M.D. (closing): The main thought I wish to convey in the paper is the part the general practitioner must play in the field of medicine, if surgical pathology is to be prevented.

Consider cancer of the uterus. Who sees these cases first? Nine times out of ten it is the general practitioner. Who delivers these women? Nine times out of ten, the general practitioner. It is up to the general practitioner to examine his patients; prevent surgical pathology and other conditions; but until we can bring the general practitioner up to that point it seems to me we are going to continue just as we are today.

Dr. Warthin, while lecturing to one of his classes a short time before he died, stated that the only real advances in scientific medicine during the past twenty-one years were the treatment of pernicious anemia and diabetes.

We want our medical schools to train young men more as general practitioners; then they may select any specialty they choose and develop in that specialty as far as they have the ambition and talent. We *want* specialists. I would not have the idea go out that we do not need specialists, but the idea that any man, without sufficient training, can call himself a specialist in any field is erroneous. We should have a standard to designate what is meant when we say "specialist".

TRAUMATIC SPINE*

PAUL D. MOORE, M.D.
MUNCIE

My interest in this subject began with the accidental observation of roentgen evidence of undiagnosed traumatic spinal lesions in old cases. Certain of these patients had some disability. A review of literature reveals that many clinicians report a high rate of late diagnosis in traumatic spinal lesions and consequent avoidable disability. Also they report too high a percentage of poor results in the treatment of the commonest spinal lesions, namely, compression fracture of the lumbar and lower dorsal vertebræ and fracture-dislocation of the cervical vertebræ. These poor results are sometimes due to the late diagnosis and partially to the methods of treatment. The late diagnosis is often due to the fact that an apparently insignificant accident of surprisingly trivial character has misled the patient and the physician to overlook the traumatic history. A direct blow or severe fall is not necessary, nor is the presence of visible contusion or of deformity or of cord symptoms necessary for a diagnosis of traumatic spine. Minor activity, such as turning the head markedly to visualize to the rear, reaching high above the head, sneezing, driving hard a golf ball, maintaining one's balance successfully when threatened with a fall, have caused fracture or dislocation. Suspicion of injury *per se* is sufficient to indicate radiographic study of the spine. A diagnosis can be made clinically but cannot be ruled out except with adequate x-ray evidence.

In confronting a diagnosis we must not be satisfied with a cursory history and physical examination. Attention to details is as important here as elsewhere. We must consider sprains and contusion, isolated dislocations, fracture dislocations, compression fractures, chip-fractures, fractures of the processes and the rarer fractures of the sacrum and coccyx, spondylolisthesis, Kuemmel's disease, epiphyseal changes, disc changes, such as Schmorl's cartilage nodes and Scheuermann's osteochondritis juvenilis dorsi.

In the differential diagnosis of the radiogram we must rule out intercalated hemivertebræ, accessory vertebræ, Pott's disease, malignant disease, Charcot lesion, occupational or postural wedging, senile atrophy with wedging, ureteral calculi, calcified glands, calcified thyroid cartilages, the psoas muscle shadow crossing transverse processes, lumbar ribs, rudimentary ribs, supranumerary ribs, aberrant ossification nuclei, intestinal content, coalescence of vertebræ in congenital scoliosis and in Sprengel's disease. Various anomalies if present must be studied from the orthopedic standpoint. These anomalies predispose the spine to traumatic lesions.

Contemporary improvements in the diagnosis and treatment of spinal injuries should awaken the enthusiasm and increase the interest of the physician in the care of the traumatic spine. An attitude of pessimistic lethargy might be justified when one considers some past results. Eikenbary states that, "In the list of state industrial patients whom I have examined or treated, together with the seventy-five others whose records I have examined, only a few, not more than five (out of his total of 206 cases) were returned to hard labor without much disability, the figures ranging from ten percent up". The cases with fusion operations have not been much improved, none were able to do hard labor.

The above report was made on 206 cases. Wallace noted bone bridges in thirty-three percent of his cases. Some of these were massive bridges, yet weak and painful backs were present. He remarks that *fixation*, either by nature or by art, will not alone relieve symptoms. The fixation is not enough. Something more is required, namely, the *proper posture*.

In treating compression fractures of the vertebral bodies without cord symptoms and with intact processes, Dunlop and Parker have demonstrated conclusively that excellent results can be obtained.

*Presented before the Indiana State Medical Association at the Indianapolis session, September, 1931.

The treatment is based upon the ability of a compressed body to return to almost normal contour and thickness when the deformity is corrected. Sante and McCutchen reviewed 400 cases of spinal fractures and noted that compression fractures heal by outgrowths of bone or exostoses from the margins of the injured vertebra, the discs remaining intact. Dunlop and Parker use the following method of reduction:

Under general anesthesia, traction and counter-traction are applied strongly. Then the patient is tossed upward under controlled tension and caught at the point of injury while he is still in hyperextension. If there is osseous comminution then a mere gentle lifting motion suffices to reduce the kyphus. While still relaxed the patient is placed on a Goldthwait frame in marked hyperextension and a cast applied. In this cast he remains during four months. He then wears a brace for a year.

The result is a restoration of the vertebral body to almost its normal width and contour, with excellent mobility and strength of the spine. Several patients have returned to heavy work without any disability. Osgood believes that with proper treatment a return to full-wage-earning ability should be confidently expected. Of thirty cases, Parker and Dunlop noted that the less perfect reductions were in vertebræ above the ninth dorsal vertebra because of fixation by the thoracic cage. But most fractures occur below the tenth dorsal to the second lumbar vertebræ, and these are the most amenable to this type of therapy. If one compressed vertebra is found by x-ray another involved vertebra should be sought for at a different level. However, one vertebra, usually the first lumbar, is most frequently compressed. None of the thirty patients developed cord injury after the Parker-Dunlop reduction.

Complications such as neurologic symptoms, fractured processes and fractures of bones below the knee occur uncommonly in compressed vertebral injuries. Vertical fractures of the body are very rare. Surgical internal fixation as by Hibbs and by Albee is indicated where conservative measures fail to shorten convalescence and especially in the dorsal spine.

In the treatment of cervical fractures LeFevre and Jackson recommend fixation and support of the head by means of a double-ring jack or collar, with turnbuckles, called the Fitzgerald collar. Traction is exerted on the head by screwing the turnbuckles, counter traction being exerted retroactively by the pressure against the shoulder girdle. Anesthesia and numbness in the extremities due to pressure on nerve roots rapidly disappear as the apparatus is adjusted. Close and accurate adjustment can be made, the position can be maintained in the ambulatory patient, and hospitalization is shorter. It is more comfortable than a halter or cast. It is kept on for eight weeks, the patient being ambulatory the last four weeks and sometimes working the last two weeks. LeFevre and Jackson found that a surprisingly large amount of symptoms such as anesthesia, paralysis, numbness and tingling are due to pressure and edema, and can quickly be relieved by proper head traction. If unrelieved these symptoms might become permanent.

Isolated dislocations are most frequent in the cervical spine. They are irreducible in one week. Manipulation for reduction of uni-lateral dislocations consists of traction in the line of deviation, abduction to the sound side to disengage the articular process and then rotation to the dislocated side and extension. Bilateral dislocation is reduced by forcible traction in flexion, then extension. (Steindler.)

Fracture dislocations occur mostly in the cervical region. Extreme dislocation may occur without a cord lesion. The early loss of reducibility and failure of early diagnosis has resulted in very few successful reductions. If there is delay it should be not more than twenty-four hours and for the treatment of shock.

Fracture of the arches occurs mostly in the cervical region and may cause compression or laceration of the cord. They should then be removed surgically. The indication for laminectomy is, therefore, early operation after the shock has passed in cases of incomplete crush of the cord, later operation in cases of progressive symptoms; operation in all cases of injury to the cauda equina. The clinical significance is slight unless cord compression results.

The articular processes are best demonstrated in oblique radiographs as first recorded by Wilms. Fracture of these processes and of the arches are of orthopedic interest in the persistence of pain or root symptoms. This persistence constitutes occasionally operative indications. Fractured articular processes are usually associated with dislocation.

The lumbar region is most frequently the subject of fracture of the transverse process, due either to a blow, but usually to torsion from violent muscle action when the spine is forcibly hyperextended, or twisted in a successful attempt to escape a fall. The diagnosis can only be made by means of a radiograph. Wilmoth places his patients on a Bradford frame for a few days, then a plaster jacket for six weeks. These cases are frequently not diagnosed and because of continued disability they are called neuroses. They assume importance when an industrial patient is told he has a fractured spine. The disability is due largely to contusion and sprain of the back. The patient can walk after sixteen days, can work after six weeks with ten percent disability lasting three to six months. (Steindler.)

Spinous process fractures are seen in the cervical region where the processes are long and slender. They assume importance for the industrial patient only. Treatment is immobilization of the arm and shoulder by strapping.

Sacral fractures without displacement respond to simple recumbent treatment for three weeks; if

complicated, operative removal of depressed fragments, rectal repair, freeing or suturing of nerves is indicated. There may be paralysis of the bladder, rectum or lower limbs.

Referred pain as a cause of coccygodynia must first be considered even when a history of injury is elicited. Lateral film studies are necessary to reveal complete and true dislocations. Minor displacements may be doubtful owing to anatomical variations in curvature. If reduction by rectal manipulation does not relieve, then resort to operative removal. If a fracture is present, conservative support with adhesive strapping, a corset or belt should be tried before excision.

The intervertebral disc can be injured but not usually narrowed in compression fractures. Disc contusions may result in late lime deposits in the disc and in prolapse of the nucleus pulposus through the cartilage plate into the vertebral body. Schmorl believes that this may be the basis for the production of juvenile kyphosis.

Kuemmel described compression of a vertebral body occurring late after mild trauma and without evidence of a true fracture. There is absence of symptoms or signs for weeks after the injury. Later pain, weakness and gibbous formation occur. Rigler's case showed a normal vertebra two months after injury and a compression nine months later. The condition is treated like a crush fracture and disability equal to one-third of working capacity for one and one-half years is recommended.

In spondylolisthesis the fifth lumbar vertebra has glided forward over the top of the sacrum. The predisposing factor is an anomalous separation of the vertebral body from the arch because of failure of fusion. The anterior segment or centrum is weakly supported and is displaced forward later in life by trauma. The posterior segment or arch remains behind. The condition is revealed best by a lateral radiograph, although the A P view shows a heart-shaped shadow of the superior surface of the centrum. No cases have ever been reduced as shown by x-ray; nevertheless, reduction manipulation does relieve pain clinically. Operative fusion of the processes is the most lasting treatment.

Discussion

M. F. Steele, M.D. (Fort Wayne): I have had a case which bears out nicely the points made by Dr. Moore in his excellent paper. This case was referred for x-ray examination about one week after the injury. The patient received this injury while diving in a lake, hitting his head on the bottom. He felt a little pain at the time, but nothing else. He went home that evening and it was three or four days before any symptoms developed in the neck. When he was referred to me for x-ray he had pain and swelling on both sides down to the shoulders. Radiographic examination showed dislocation of the fourth cervical vertebra. Dr. Moore and I talked before this session and decided that the fourth cervical is the one generally dislocated in injuries of this sort. It was a hinge dislocation, and with a splint put on by an orthopedic surgeon, and with pressure, there was no reduction. We finally removed the splint, and the last time I examined this patient the cervical body was in the same position as before, and the patient has complete use of the neck. It was a rare case to me. Possibly others have seen the same type, but I had not. The dislocation finally became symptomless, the patient not complaining of pain, having the use of all the muscles and their attachments, and being able to carry on his daily occupation.

A ROMANCE OF PATERNALISM*

Walter F. Donaldson, M. D.
PITTSBURGH

Tom Jones and Paul Smith, each aged twenty-one years, graduated together from a Pennsylvania college in June, 1918, and immediately enlisted for service in the World War. They remained in separate training camps in the United States, and were honorably discharged in improved health in December of the same year.

Jones entered a broker's office, and ten years later, at the age of thirty-two, was prosperous and in good health, except for an epididymitis, which developed in 1930 after an ardent but ill-fated affair with a woman of easy virtue. Smith entered medical college in 1919, and after the necessary five years of preparation and two additional but voluntary years of hospital training, began practice in his home town, and in 1930 was chosen to be the genito-urinary surgeon on the staff of the local general hospital.

Broker Jones consulted Dr. Smith, his former comrade in arms, regarding his infection, and Dr. Smith advised an operation, to be performed at the home town hospital, and plans were made accordingly. But an enthusiastic former comrade, with a political slant toward special benefits, hearing that Jones was hospital-bound, reminded him that a vote-seeking group of congressmen had recently successfully piloted through Federal legislation providing free hospitalization and treatment for all former soldiers, regardless of their ability to pay or the relation of their disability to their war service. So, prosperous Jones, with his impairment received in an *affaire d'amour* eleven years after his discharge from the army, was transported, at government expense, to and from a distant government hospital, while Dr. Smith chalked up another fee lost, and the local hospital another empty hospital bed, to the absolutely unfair paternalistic competition of Uncle Sam.

Who provided the cash to pay for Broker Jones' free transportation, free hospitalization, and free treatment? His former comrade Dr. Smith, his

*Read before the Tristate Conference, Philadelphia, May 23, 1931.

neighbors who maintain the hometown hospital, and others who pay a Federal income tax. Approximately 15,000 of the approximately 30,000 World War soldiers at present in recently built, but frequently unnecessary government hospitals, are being treated for ailments in no way related to their army experience, and without consideration of their financial ability to pay the charges of hospitals and physicians adjacent to their places of residence.

Was Jones, during his convalescence at the hospital, much in contact with other patients—the much honored and worthy beneficiaries of a grateful government? No! Those today in government hospitals surviving wounds and sickness or disease actually related to war or camp service number but 15,000, and they are often segregated from the other 15,000 at present in government hospitals, who, like Jones, are receiving free treatment for ailments in no way related to their army experience and without consideration of their ability to pay for treatment nearer home. So, in company with other country club members, who are convalescent from tonsil or appendix operations, or from an attack of gout or "nineteenth hole" neuritis, Jones whiles away a prolonged period of convalescence criticizing the wise president of the United States, who successfully obstructed the passage of legislation designed to extend the same economically unsound free hospital benefits to all the members of the families of former soldiers. Of course, Jones and the others wondered when an ungrateful government would include free clothing and free shoes, or begin to transport its indolent heroes to free hospitals built in Hawaii or Porto Rico, rather than to those only 2000 miles away from home.

After a stay in the hospital three weeks longer than necessary, or possibly had Jones been paying for it (it is difficult to find enough patients to fill the beds in many of the government hospitals), Jones returned to his home town, where for a long time he "groused" about the quality of the free service he received from a bureau-controlled government hospital.

In the meantime, Dr. Smith having aroused the interest of his fellow Federal income-taxpayers on the board of directors of the local hospital, as well as in the county medical society, is, or should be, endeavoring to convince his congressmen and the senators from his state that the Federal government must respect certain fundamental principles of "states' rights," and abandon its policy of providing free medical and hospital care, and financial relief for war veterans, except for impairments which can be reasonably related to war service, or the veteran who is unable to pay for treatment. Dr. Smith contends that since physicians represent the first group of citizens whose economic welfare is seriously threatened by this form of paternalism, and since they compose one of the few remaining individualistic professions, it is the duty of physicians to become politically conscious and to take the lead in fighting for recognition of "states' rights" and for discontinuance of Federal interference.

Those of us who retain knowledge of the meaning and relation of such Victorian words or terms as "pork barrel," and "rivers and harbors," to congressional raids on the Federal treasury, will no doubt agree that the large sums of Federal money spent in a congressional district to "improve" the harbor facilities of an erstwhile lackadaisical creek or river, or to erect a post-office building extravagantly large and ornate for the actual service requirements, pale into insignificance politically when compared with the patronage possibilities following upon success in landing a $2,000,000 veterans' hospital for the "old home district." The initial investment may appear a paltry sum, but the annual budget and the political strength and patronage garnered in the influence of several hundred hospital employees in a congressional district may assure the fortunate congressman many terms in office. Therefore, the Veterans' Hospital Racket is here to stay.

Surely, those who pay taxes in the United States Government will not supinely continue to approve free medical, surgical, and hospital treatment of the disabilities of 4,500,000 veterans which originate as ordinary incidents of every-day life twelve or more years after the World War ended. Congressmen and senators who support such legislation must be rebuked at the polls, and the great majority of the veterans retaining their patriotic principles must repudiate the noisy minority who continue their raids on the public treasury.

An editorial writer in a recent issue of the *Outlook* ascribes the victory in the passage of the Johnson Bill to the "grasping element in the American Legion," and to "cheap politicians in Congress who will oblige any vigorous minority in order to be re-elected." The same writer describes the bill as: "A grab, a gouge—nothing more. Under the guise of providing for some meritorious borderline cases of disability, it opens the door for general pensions for everybody (4,500,000) who wore khaki during the World War.

"When the country adopted the War Insurance Act in 1917, it was assured that the scandals of the G. A. R. pension grab would never be repeated. When it granted the bonus, it was reassured again. The Legion itself went on record as opposed to general pensions. Yet, where are we now? Now we have a brand new method of granting money based on present-day accidents in civil life, and having nothing to do with the war."

With full knowledge of such facts, Calvin Coolidge said: "All countries on earth in all history, all put together, have not done as much for

those who have fought in their behalf as our country alone has done since 1880."

It becomes hard for physicians to remember the earlier resolve to support every possible form of assistance to veterans, the victims of disease and injury resulting from war service, when we look on with righteous indignation while prosperous veterans are treated, without cost, at government hospitals, for civil life impairments such as enlarged tonsils, while vacant beds remain plentiful in home-town hospitals that are supported by the same citizens whose tax money also pays for the erection and maintenance of the already too numerous veterans' hospitals.

Apparently nothing can daunt the determination of the American Legion and other veterans' organizations in their relentless march toward bigger and better government aid for ex-soldiers. Following the recently enacted Federal legislation making available the cash bonus will come the already announced legislative program for immediate bash payment of all bonus certificates at their matured value. Who shall take the lead in developing resistance to this veterans' pressure, in shaming veterans out of such demands? If our younger men are taught that service to their country means that our Government thereafter must reward them irrespective of their needs, then we are indeed undermining the very foundations of good citizenship. Veterans must develop and manifest a peace-time patriotism before the burden of pensions becomes intolerable.

Our Civil War pensions, instituted in 1879, amounted in the year 1919 to $125,000,000, or four times as much as they were fifty years earlier. If, as was recently proposed by National Commander O'Neil, of the Legion, the next Congress grants equality of pensions for veterans of all wars, then in a short time the Federal government will be paying out annually to its more than 4,000,000 veterans more money than we spent while actually engaged in the World War. A Billion Dollars A Year!

Dr. Smith, while agreeing that our Federal government should show every possible reasonable consideration to our war veterans, also emphasizes the fact that a larger proportion of physicians entered government service in 1917 and 1918 than from any other professional group. When the proposed forty-seven or more veterans' hospitals, each sustaining more salaried employees than patients, have been completed and occupied, then will "state medicine" have been thoroughly established throughout the United States, never to be displaced because of the political patronage involved. And when veterans or their relatives no longer abound, then will the free hospital service be extended to other citizens; and by 1960 the private medical practitioner and the neighborhood hospital may largely have passed out of the picture.

Think it over, readers or hearers of this basically true story. Discuss it with your tax-paying neighbors, and with your congressmen. Any governmental policy which decreases the present-day attractiveness of medical practice to the intellectual type of mind, and causes men of ability to forsake it, is certainly against sound public policy. None can successfully deny, it is believed, that the Federal government, by the policy herein complained of, is in unfair competition with private physicians and the supporters of local hospitals who in turn are taxed to finance this paternalistic, bureaucratic form of medical and surgical hospital and dispensary practice.—[Reprinted from the *Pennsylvania Medical Journal*, August, 1931.]

INDIANA UNIVERSITY SCHOOL OF MEDICINE

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CRITICAL EVALUATION AND PRESENT STATUS OF THE THEORY OF CHRONIC FOCAL INFECTION

J. K. Berman, M.D.

For a good many years the medical profession has believed and practiced whole-heartedly the philosophy of chronic focal infection as the cause of various baffling diseases. So thoroughly and assiduously have physicians practiced this belief that they have failed to take cognizance of the onward progress of scientific investigation and acumen. They have not paused to evaluate either the logic of this theory nor the results derived from its practice. A good many of the leaders in our profession are still insisting on the unqualified adoption of this theory. Text books are either afraid to dispute it or their authors do not wish to antagonize their medical public. Universities are teaching their students this theory as sound and proved basic medicine. Articles continue to appear in current literature concerning the miraculous results from the removal of foci of infection. The object of this paper is to review briefly some pertinent facts relevant to the soundness of this theory in its everyday clinical application.

Since the days of Pasteur, Koch and Lister the medical profession has been searching for a specific germ as the cause of a specific disease. When no germ was found it was thought that such an organism must be present but was hidden away somewhere in the "nooks and crannies" of the human body. These hidden areas led Ruth, Miller and Passler and Billings to advance the idea that chronic foci of infection, innocent and symptomless in themselves, may be the cause of systemic disease. Recently Rosenow has developed his theory of selective localization, which simply means that particular germs residing in chronic foci of infection will produce certain specific diseases when injected into experimental animals.

Definition. The theory of chronic focal infection as it now stands assumes that a circumscribed area of tissue or a collection of cells in which microorganisms exist, acts as a chronic focus of infection and disseminates bacteria or their toxins over the body by way of the blood stream or lymph channels, causing systemic disease.

Theoretical Soundness. This definition in the light of recent experimental work by Andrews would simply mean that every organ, every muscle and every mucous membrane in the body is a potential focus of infection, for they are all laden with germs. Please note that we are not referring to an acute virulent focus. The old adage of "where there is pus it must come out" still holds.

It is quite easy to understand how an acute virulent focus such as a septic wound, a septic abortion, an acute appendicitis with abscess formation, may produce a septicemia or pyemia as a result of septic emboli and create secondary foci of infection. It is also easy to see how an acute focus as diphtheria or tetanus may produce a profound toxemia. But in these conditions we have the well-understood and commonly observed laws of infection on the one hand and body resistance on the other. In the first place we have an obvious focus. It is made obvious by the well-known clinical signs of inflammation, namely heat, redness, pain and swelling; and the body reaction is equally obvious for we see chills, fever, leucocytosis, marked prostration and all the other signs of septicemia. In this fight between a focus of infection and body resistance, one of two things takes place. Either the focus is thoroughly walled in and the body defenses quickly annihilate the invading organisms or the body is unable to cope with the infection and the blood stream and reticulo-endothelial system is found loaded with germ life and the patient succumbs. Even in chronic infections so called, we have these same fundamental principles involved to a lesser degree. However, in the theory of chronic focal infection we are asked to assume that all of the fundamental basic conceptions of infection and resistance as we know them clinically and theoretically shall be set aside and that we shall believe that here is a focus which fails to excite either a local or a general body reaction yet is capable of producing innumerable diseases. Welch's law of reciprocal immunity does not hold, for such germs are obviously innocuous to their host. Furthermore, we are asked to believe that a devitalized tooth may produce a secondary focus of infection in the joints. Yet we are asked not to assume that each of these secondary foci are primary foci in themselves. It is only fair to state on the basis of a priori logic that if the tooth is a focus and the joints are involved with the same germ as the tooth each joint is in turn a focus and should theoretically, even though the germ be of a mildly virulent character, overwhelm the patient with a fatal septicemia.

Certainly we have no right to assume, theoretically, that the removal of a primary focus would cure secondary foci which are themselves the seat of active primary disease. We may reason further that if a focus of infection has germs of such low virulence that they do not excite local symptoms it is not plausible that such germs should excite profound systemic diseases that are attributed to them. It has been said that massage of the tonsils will cause a leucocytosis and systemic disturbance; if this be true it should occur to some degree after every act of swallowing.

It is not necessary to assume that a germ has a particular affinity for tissues. It is more in accord with well-known laws of infection and recent experiments that certain tissues are infected because of decreased local resistance or because they are *loci minoris resistentiae.*

Lastly, it is admitted by even the most ardent adherents of the theory of focal infection that because of the remarkable defenses of the body in the blood and reticulo-endothelial system obtained through good heredity, people with a good family history do not get systemic disease in spite of focal infections; whereas those individuals with a poor family history are the victims of systemic disease, whether they have focal infection or not. Does it not follow then, *a posteriori*, that it is better to build up general health—to wipe out so-called foci of infection—then go hunting for these foci in order to build up general health?

The Experimental Soundness of the Hypothesis. The vast amount of experimental work, particularly as regards the germ life of the mouth, tonsils, teeth and many organs of the body in general, has demonstrated conclusively that many of the so-called chronic foci of infection are not really foci. An equal amount of experimental work on the great group of diseases said to be caused by chronic foci of infection, such as arteriosclerosis, chronic infectious arthritis, thyrotoxicosis, chronic cholecystitis, gastric and duodenal ulcer, etc., are probably not caused by foci at all. Concerning the proof of these statements more will be published at a later date when this discussion may be printed in full. We may conclude or summarize the experimental status of chronic focal infection by quoting from the British Research Committee of 1930: "The suggestion of Rosenow and his colleagues that similar organisms to streptococci of the mouth are the cause of poliomyelitis is contradicted by the evidence produced by Bell in 1917. Similarly, there is no satisfactory confirmation forthcoming for the view that streptococci are the cause of gastric ulcer, appendicitis, cholecystitis and a variety of diseases of the central nervous system."

The Practical Application of the Theory. Defenders of the theory who admit its failure in practice give as the cause for this failure the three following reasons:

1. A focus may be present and not be the cause. In the words of Dr. Barker, "My own feeling is strongly against indiscriminate extraction of teeth,

even of pulpless teeth, when one can find no definite reason for incriminating them." The wholesale removal of so-called foci uselessly needs no further comment.

2. The focus may be the cause but removed too late. The recent work of Andrews and Ruebridge show that the body is literally teeming with germ life at all times. Since body resistance is so great it is not logical to assume that the body could not overcome residual infection after a so-called chronic focus, if it is a focus, is removed. Certainly the body does this after the removal of an acute focus of infection if it is able to cope with the infection at all.

3. Nothing organic may be wrong, a suspected focus is removed and gets undeserved credit for cure.

Concerning this statement we all agree.

Evils of the Theory. Within a comparatively recent time we have seen two cases allowed to progress to an incurable state, who had their teeth and tonsils removed in an effort to cure their ailments, which were diagnosed as myositis in the first case and secondary anemia in the second case. The former was carcinoma of the breast with metastasis to the vertebræ and the latter was carcinoma of the cecum. Obviously as surgeons we would see a lesser number of these errors based on the philosophy of focal infections than would our medical confreres.

Conclusions:

1. Acute and chronic collections of pus may act as foci of infection and should be treated in accordance with sound surgical principles.
2. Acute infections anywhere in the body act as the point of entrance of systemic infection and should be treated in accordance with principles of medical and surgical therapeutics.
3. The existence of chronic and symptomless foci of infection as a cause of systemic disease has not been proved adequately.
4. Recent experimental work shows that most tissues of the body are contaminated by micro-organisms which are harmless unless disturbed.
5. The basis of the theory of chronic focal infection does not appear to be sound, theoretically, experimentally or clinically.
6. The theory of chronic focal infection as a basic philosophy in the treatment of systemic disease has been applied in an uncritical manner.
7. Because of the manner in which it has been applied it has been grossly abused.
8. Medical thought seems to be swinging away from the theory of chronic focal infection.
9. A plea is made for a return to sound and basic principles in the diagnosis and treatment of systemic disease.

Discussion

G. S. Bond, M.D.: Dr. Berman has laid down a very concrete plan of the significance of focal infections so that one may get an idea as to the relative importance they show.

I would like to add just one more conception that is generally held in the mechanism of the focal infections and systemic diseases which was not brought out by the essayist.

Systemic infections are naturally self healing and, therefore, the focal infection is a thing that continues these infections. Cardiac disease offers a very good example of the relationship to foci of infection and I can use it to draw several illustrations. In the first place, rheumatic endocarditis is a very good example of a known focus because it so frequently follows an acute tonsillitis and yet here we very often see rheumatism, chorea and endocarditis without any evidence of tonsillar infection. Second, it has not been shown very definitely that removal of the tonsils does not prevent further recurrence of these conditions. Third, in subacute bacterial endocarditis we have a known systemic infection, either latent or acute, but we have no obvious local focus and it has been shown that the removal of these foci usually does very little toward eradicating the disease. These examples would tend to indicate that after the internal infection is once started it continues even though the local focus is destroyed. In heart disease, of the functional type, local foci not infrequently seem to be the cause of the symptoms. The fatigue, palpitation, pains, etc., are relieved by the removal of some local infection. Fourth, in a group of cardiovascular renal disease, associated with those degenerative processes of old age, foci of infection are often given as the fundamental cause. One sees, however, a great deal of work done toward eradicating these points of infection with no apparent benefit on the general process. I feel, therefore, that here we are working rather blindly, and oftentimes largely in the hope that we might do some good for our patient.

Robert M. Moore, M.D.: It is a well-established fact that foci of infection play an important part in the etiology of disease. Neuritis, urinary tract infection, choroiditis, arthritis, and many other conditions have been relieved greatly and often cured by the removal of foci of infection found in tonsils, teeth, sinuses, gastro-intestinal tract, cervix, tubes, prostate, etc. In discussing focal infection with especial reference to the danger element of disturbing latent foci of infection, one should keep in mind a simple working basis as to what constitutes health and disease. Grote defines health as the capacity of the organism for adequate responses to influences in its surroundings, and disease as inadequate responsiveness of an organism to influences in its surroundings. A sick person is one whose vital responses are inadequate to his biological needs. These definitions are rather broadly conceived, but they obviously

widen the conception of disease so as to include all forms of inadequate responsiveness—bodily, psychical and social. Not so many years ago we made our diagnosis almost wholly on symptoms. A patient who stated he had a cough would receive a cough mixture, or a patient who stated he had a pain over the kidneys would receive kidney medicine. Later we advised our patients chiefly by the anatomical changes which we found. For example, a patient with a large heart, without any investigation of the cause, would be told that he had a bad heart and only a short time to live. Then we entered the era of etiology or cause of disease, which all will agree was a marked advance in medical progress; however, our enthusiasm to ascribe too many symptoms to latent foci of infection and its wholesale removal has no doubt reflected unfavorably on the profession.

In my discussion of the evaluation of latent foci of infection and its removal, I wish to stress two points. First, the careful consideration of the constitutional make-up of the patient, because constitutional factors play a very important role in the origin of many well-known diseases. It is obvious in the so-called hypersensitive, congenital asthenic, often visceroptopic type, that the removal of any foci of infection, unless there is a well-defined indication, most usually intensifies rather than corrects the patient's symptoms. It is surprising how many practitioners, skilful as they may be in physical diagnosis, are lamentably lacking in training for the quick and safe recognition of evidence of feeble intelligence, of disordered emotional life, of faulty will, of tendency to social maladjustment, or of conduct disorder. It is my desire to bring before you in the above statements the importance of keeping in mind the constitutional make-up of a patient and the relation it has to health and disease before ascribing too many symptoms to questionable foci of infection. It is not necessary to enumerate the disappointing experiences which all of us have had in dealing with this group of people. Personally, I am inclined to take a positive stand against removal of teeth, tonsils, sinus drainage, appendectomies, etc., in this particular class unless there be well-defined, unmistakable evidence of disease in these foci.

In considering the second group of people in whom one must keep in mind the danger of disturbing latent foci of infection, I shall mention only a few for your consideration. First, the chronic valvular heart, usually rheumatic heart, inactive. One should always realize the danger of enthusiastic eradication of foci of infection in this group of patients because of the tendency to reactivate an active endocarditis, occasionally resulting in the fatal disease, subacute bacterial endocarditis. There are a number of cases on record to verify this observation. Second is the essential arterial hypertension group. It is not an uncommon observation to find these patients who have had numerous operations in an attempt to remove the cause of their hypertension, most usually tonsillectomy, extraction of teeth, and similar procedures. Should there be definite infection in these various foci there is no contra-indication for removal when the patient is properly prepared. On the other hand, it has been shown that such conditions have no direct bearing on the disease which is under consideration, and oftentimes the patient's symptoms have been augmented greatly. I have known eradication of latent foci of infection in a patient with a masked hyperthyroidism to produce death, this being due to fluiding the system with infection as well as shock. I should like to mention a word of caution here concerning the methods occasionally employed in investigating latent foci of infection. I have seen such examinations result in chills, fever of 105, and the patient continue ill for several weeks.

In the short time allotted me to discuss this very important subject, I want to stress first that the removal of well-defined foci of infection has given satisfactory results when the patient's general condition has been considered thoroughly. One should always keep in mind the constitutional make-up of his patient before he attributes all symptoms present to the usual foci of infection.

Second, in conditions such as chronic valvular heart, essential arterial hypertension, hyperthyroidism, etc., one should use great caution in disturbing latent foci of infection, which usually is contributing nothing whatsoever to the disease, but if disturbed may precipitate a more serious condition.

Third, I think the time has now come for all professional men to apply common sense rules in giving advice to patients seeking relief of symptoms, and not allow our enthusiasm to cause us to advise procedures which may make our patients worse instead of better.

Fourth, a carefully taken history, a thorough examination of each individual patient will eliminate in a great measure many of our unsatisfactory results.

SPECIAL ARTICLE

DIPHTHERIA DEATHS IN INDIANA OCTOBER, 1931

We are very much afraid that a serious epidemic in diphtheria is starting. For the last week in October there were 109 cases reported in the entire state and for the following week 94. Both of these are considerably higher than for any other week during the past twenty-one months. Furthermore, the deaths for the month of October are high, eighteen for the entire state. With the large number of cases reported at the end of last month and the beginning of the present month, it is not unlikely that the number of deaths for the month

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EDITORIALS

SURGICAL ANESTHESIA

Recently much has been said concerning various types of anesthesia for surgical operations, and spinal anesthesia offers the latest bid for approval. In this connection we quote the substance of an article entitled "Anesthesia Problems," by Dr. A. D. Bevan, of Chicago, as printed in the *Journal of the A. M. A.* for November 21, 1931, in which it is stated that spinal anesthesia is very dangerous, more so than chloroform, to say nothing of its being an unquestionable danger for the patient. Once injected, the agent used is beyond control. It does not eliminate promptly, the method is not simple, and the technic could not be adopted generally. Complications such as severe headaches sometimes last a week, and it is questionable if spinal anesthesia ever should be the anesthetic of choice. In the summary Dr. Bevan says that the use of chloroform, of intraspinal anesthesia, of intravenous anesthesia, of intrarectal anesthesia, of intratracheal anesthesia, of anesthesia with any of the so-called basic anesthetics such as scopolamine, avertin and amytal must be limited to very narrow fields. Fortunately, local anesthesia, gas anesthesia, and ether afford three anesthetic measures which if handled by an expert can be used alone or in sequence with abolition of pain, and if desired, abolition of consciousness, and when required, complete relaxation, and with them one can secure complete anesthesia for any and all surgical operations. This places anesthesia on a very unpretentious, simple basis, for here, as in all fields of surgery, it finally becomes apparent that simplicity is near truth. The general adoption of this simple scheme of anesthesia will prevent many anesthetic accidents and save many lives.

A NEW CONCEPT IN BACTERIOLOGY

We seriously doubt if it is possible to appreciate the possible consequences of certain new discoveries and concepts in the science of bacteriology. This science has been of tremendous service to the theory and practice of scientific medicine but has been hampered considerably by the fact that it had become so staid and conservative that little really new progress was being made. At least this was true until a very few years ago. Doubtless the bacteriologists themselves were to blame for permitting the science to get to such a place that many competent practitioners were of the opinion that a bright high school graduate with a few weeks of training could do the bacteriology work that needed to be done. There is as much sense in this idea as in the companion delusion that a plumber might in a few weeks be taught to do an appendectomy. It is surgical judgment that makes the difference between a real surgeon and a man who manipulates surgical instruments. So it is a broad understanding of the subject that makes the difference between a bacteriologist and a technician. Unfortunately the technician knows nothing of the theoretical basis of the science that has laid the foundation of much of the science of medicine.

For several years it has been suspected that bacteria may exist in other forms than those with which we are more or less familiar, but it was not until quite recently that anything like proof of the belief has been possible. During the first part of the current year Dr. Hadley, of the University of Michigan, summarized the literature on the subject and also described his own experiments relative to the existence of filtrable forms of well-known bacteria. He shows that it is possible to get bacteria to change into forms that are invisible under the microscope and can pass through the pores of a porcelain filter. These bacteria are believed to have a complicated life cycle somewhat as do, for example, the malaria plasmodia, though of course the details are different. Recently Dr. Kendall, of Northwestern University, has devised a new form of culture medium—"K" medium—which will cause bacteria planted into it to change rapidly to the filtrable or invisible phase of their life cycle. As opposed to most bacterial media this one does not contain protein decomposition products, but rather the unaltered body proteins. As a result the bacteria grow in it much as they do in the animal body, and are encouraged to assume the invisible form in which they are frequently present in the actual disease. It may even turn out that some of the filtrable viruses may be nothing more than our old enemies in a different guise. It would seem that this discovery may solve the riddle as to why poliomyelitis seems to be due to a streptococcus in Rosenow's laboratory and a filtrable virus in other places. It seems not unlikely that these workers merely have caught the germ in two different phases of its life history. Many other perplexing problems of theory seem to be solved by these discoveries. We do not expect the new theory to change bacteriological practice within the next few years or months, but we believe they are of immense value to the theory of the science, and we must remind the practical man that good practice rests squarely upon sound

theory, and that without advance in theory scientific medicine is soon suffering from a bad case of the doldrums. We believe that the new understanding of the nature of bacteria is of immense consequence.

DIPHTHERIA IMMUNIZATION

There still are doctors who cannot be convinced that diphtheria immunization is safe, and as a result children of their clientele are not being immunized against this dangerous disease. It should bolster the courage of these men to be reminded that the American Medical Association, the Indiana State Medical Association, the American Public Health Association, and scientific medical associations everywhere have endorsed the plan as being the means—and the only means—of stamping out this plague of diphtheria. In the early days of toxin-antitoxin there were some rather severe reactions, but such is rarely the case now-a-days. The amount of toxin given is so small—one-tenth of the amount that would kill a half-grown guinea pig in four days—and most of that is neutralized by adding antitoxin. Evidently such a minute dose could hardly cause harm to a child. Or if it is still feared, let the doctor use toxoid which is much less toxic and probably more effective in immunization. Toxoid, in our opinion, is to be preferred to toxin-antitoxin for the immunization of children. For adults we still prefer the antitoxin.

Unfortunately some doctors have told the parents of children immunized that the process is one that certainly will give absolute immunity. Really there is no such thing as absolute immunity to any disease. Some of these supposedly immune children have taken diphtheria, and it has then been reasoned that the process was of no value. A few children will become susceptible after a few months. The percentage of such children varies, according to different statistics, from ten to thirty percent of the whole number immunized. This is of course most unfortunate, but not as bad as it sounds if the whole community were so treated. It would be impossible for an epidemic of diphtheria to pass through a neighborhood if seventy percent of them were immune. While we do not advocate the use of the Schick test as a preliminary to the giving of toxin-antitoxin or toxoid, we do believe that it is valuable as a check up to see whether or not the procedure has been effective. The best way to do this would be to set a date—probably a Saturday afternoon—and have the parents bring the children all at once. In this way the test can be given in a minimum of time and expense. We believe that included in the cost of immunization should be the Schick test after three to six months.

Sometimes the cases of "diphtheria" following immunization are really streptococcus throats or Vincent's anginas. It is extremely important to make absolutely sure before saying that the immunization has failed, because such false reports have a serious effect upon the immunization program in a given community. The best test as to whether immunization is effective or not is the death rate. Before the days of antitoxin diphtheria death rates were usually up about fifty deaths per hundred thousand a year. After 1900 they dropped to an average of about fifteen to eighteen and stayed there with 1921 (in Indiana) going to near twenty-five. Then immunization began to be practiced and an increasing number of children have been so treated each year. Apparently as a direct result the rates began to drop and have dropped each year, with one or two little exceptions, to new low rates. Now for four years we have made new record low rates. Nothing has been done to improve diagnosis or treatment in that time. Furthermore, the two cities having done the most immunization work in Indiana have amazingly low rates recently. These two cities are Indianapolis and Evansville. Good work has been done there.

We are not claiming that the method always will give immunity, but are insisting that it is safe, certainly infinitely safer than allowing the children to have the disease. Let's get in the parade if we intend to practice twentieth century medicine.—(Submitted by a member of the Indiana State Board of Health.)

HARD TIMES AND PATENT MEDICINES

In times when honest folk who pay their doctor bills are short on ready cash they are inclined rather strongly to self-diagnosis and self-medication. Such a situation makes a harvest for all sorts of patent medicine vendors who hold out the hope of relief at a minimum of expense. There is not the least use for us at a time like this to remonstrate, for it takes years for educational programs to have their effect and by that time the piping days of prosperity doubtless will have come again. Very likely it is true that it would be far cheaper to go to the doctor as usual, but the hard-pressed layman does not entirely believe this. He is hoping that this may be the time when Konjola will do just as well.

In such times the physician has a responsibility. If folks are determined to use self-medication it becomes the duty of the profession to help direct them away from the more dangerous forms of dosage and toward those forms which, while they may not do great good, are capable of no considerable harm. We have in mind physicians who, though they need the business, are making far fewer calls than they did two years ago. They are familiar in a general way with the ailments of the members of a given family, and knowing that the family simply cannot pay doctor bills, except in case of emergency, have advised them

casually to get this or that at the drug store or to use one household remedy or another. In this way they have served the family; they have kept them from getting the patent medicine habit: they have kept them from going to some free clinic where they might get the clinic habit. When times are good again it is reasonable to suppose that the family will come back to the friend who has put service above self at a time when a nickel looked like a quarter.

By keeping in touch with the family in this way the physician is able to help them detect the incidence of disease that is not in the reach of home remedies, and can then with a clear conscience present such a bill as seems indicated. It is infinitely better for the patient to go to the drug store and ask for some simple medicament by its right name than it is for him to go and ask for a bottle of Dr. Somebody's God-knows-what. The physician can do a great deal to curtail the sales of patent medicines by suggesting a cheaper, better and safer substitute.

BALLYHOOING DOCTORS

On numerous occasions we have called attention to the inexcusable practice of prominent medical men in permitting their names to appear in the lay press in connection with eulogistic and flattering articles concerning themselves, even though ostensibly such articles are supposed to convey medical or surgical information of interest to the public. For several years we have noted that sessions of the American Medical Association, and more particularly sessions of the American College of Surgeons, and the Postgraduate Assembly, have brought forth much objectionable publicity for some of our most prominent physicians and surgeons, and a few of the write-ups have been so extravagant in praise of the abilities or achievements of certain doctors as to leave little room for doubt that the articles were inspired if not actually furnished by the physicians themselves for selfish exploitation purposes. At the recent session of the American Medical Association in Philadelphia, one of the most prominent surgeons in America is reported to have gone to the office of a Philadelphia newspaper and tendered for use in the lay press his photograph and a biographical sketch of his official connections and a record of his more important contributions to the advance of surgical practice. A good deal of the material offered was not used because the censor for the American Medical Association already had informed both the Associated Press and the United Press that there should be no ballyhooing for any individual medical man taking part in the Philadelphia session of the Association, although no objection would be made to publishing as news those facts concerning the work of the Association that the public should know, or in which the public might be interested. Subsequently at the New York session of the American College of Surgeons some of the most prominent Fellows of the College, either intentionally or unintentionally, received a good deal of publicity in the lay press that could be considered nothing short of personal advertising. Likewise, practically every session of the Interstate Postgraduate Assembly is marked by a good deal of exploitation in the lay press of prominent members of the Assembly, and even if the officers and others taking part in the work of the Assembly do not furnish the copy it would be quite possible to get enough ammunition by consulting the flamboyant program that is issued by the Assembly for its annual sessions.

We are quite willing to admit that in all probability some of the material used in the lay press in writing up a few of our prominent medical men has been obtained in an indirect way, though we have received what we believe to be trustworthy evidence from reporters and managers of newspapers which indicate that some of the prominent men in the medical profession are not only willing to be interviewed but seek it, and on such occasions find no hesitancy or embarrassment in exploiting themselves in extravagant terms. That these men are breaking all the rules of ethics and ordinary professional decency does not seem to matter, for the practice goes on and the offenders are not brought to justice. Furthermore, so far as we know, not a single one of the offenders ever has been asked for an explanation, and not any one of them ever, so far as we know, has volunteered to give an explanation.

The New York Academy of Medicine, and the Medical Society of the County of New York, have taken special action upon this matter of self-exploitation by physicians and recently have stated that their members should act in accordance with medical traditions and the code of ethics, and specifically referring to transgressions such as we have mentioned, we find the following statement: "This form of publicity is objectionable and cannot be countenanced." The code of ethics adopted by the American Medical Association and its subsidiary organizations, state and county medical societies, distinctly decries objectionable publicity by self-seeking physicians whose only design is to aggrandize their persons beyond all merit. In this connection it should be remembered that the British Medical Association expelled Sir Arbuthnot Lane for allowing his name to be used for advertising purposes, but then, as a contributor to *Southern Medicine and Surgery* says, "The British have a way of meaning what they say and of impartially enforcing their laws, and they believe firmly that *noblesse oblige*. On this side of the Atlantic it is a common saying that 'you can't convict a million dollars'!"

Our contention is that if the code of ethics is to be our guide then we should insist that it be a guide for each and every supposedly reputable

practitioner of medicine. None should be exempt, no matter how "big" he is. If any are to be exempt because of their prominence in the profession, or for any other reason, then, as suggested by the editor of *Southern Medicine and Surgery* in September, 1930, "Let's ask the secretary of the A. M. A. for a complete list of the exempt so that we shall be in no doubt. If none is exempt let's see that the proper steps are taken to enforce the regulations. If the regulations are not to be taken seriously, let's do away with them formally and publish it to the world that membership in medical organizations is open to any and all who hold licenses to practice medicine." To which we desire to add that we are opposed in a most emphatic manner to disciplining and penalizing the "little fellows" in the medical profession for infractions of our code of ethics while at the same time we let the "big fellows" go free though ten times more guilty. If our code of medical ethics is worth anything at all we should call a halt on this self-exploitation in the lay press by prominent members of our profession, and if the code of ethics is not worth anything, and meant to be rejected, then let's wipe it off the slate altogether and tell the "big fellows" in the medical profession to herd with the quacks where they belong and see which can prepare the most convincing copy for the lay press.

TAKE THE STING OUT OF STATE MEDICINE

"Who wants state medicine?" is the title of a paper by a representative of the Public Health Federation, published in the March, 1931, number of *The Journal of Medicine* (Cincinnati). While the argument emanates from a source where it is thought that state medicine is looked upon with considerable favor, yet the arguments presented are comprehensive, and in the main logical. The claim is made that many thousands of people are not getting adequate medical service because our machinery for the care of the indigent is inadequate in many respects, and particularly because people of the middle classes are unable under our present plan of organization to meet the cost of sickness. The public has begun to realize that an enormous amount of sickness and a great many premature deaths can be prevented by putting into practice the knowledge that medical science has given us. Therefore, it is the purpose of some forward-moving individuals to make available to all of our people the best that medical science has to offer to prolong life, to maintain health and to prevent unnecessary suffering, while at the same time preserving the dignity and independence and prestige of the medical profession. To accomplish this end it will be necessary to have the active support, cooperation and leadership of the medical profession. A challenge has gone out to the medical profession, and it is up to the profession to find a solution to the problem that is offered. If we do not find a solution it may come to pass that we will have state medicine in an obnoxious form whether we like it or not.

A feature of the address that is interesting is the reference to insurance against sickness, and concerning this matter the author says, "One reason why people have so much difficulty in meeting the costs of illness is because it is an uncertain item, comes without warning, and is impossible to estimate. In all probability the problem never can be satisfactorily solved without a practicable means by which the bulk of wage earners can be insured so that they will receive some adequate measure of income during times of sickness. Workmen's compensation with all of its defects is socially sound, has represented a marked advance, and prevented much suffering among the families affected. In 1929 $3,700,000 was paid to Ohio physicians out of state funds. It is absolutely certain that many of these men could not have paid their physician's fees but for the compensation plan. It is only in the administration and functioning that criticism is warranted, and these two things can be remedied. The same principle employed might well be applied to sickness. This is a subject that requires most careful study, and the medical profession instead of opposing any possible form of insurance should be giving the matter careful attention in order to help find out whether there is some plan that will be satisfactory to all concerned. It would seem that compulsory state insurance to which both employer and employee would contribute is the only practical plan. Such a plan, however, does not have to provide, as is done in Europe, that the state shall impanel the physicians. There is no inherent reason why such an insurance plan might not simply provide the beneficiary with certain stipulated compensation in case of illness, out of which he himself would retain and pay his own physician. The spread of sickness cost by means of insurance is by all means the most fundamental suggestion that has been offered."

REQUIREMENTS FOR MEDICAL PRACTICE

It is not generally known that the laws concerning and restricting the practice of medicine come under the so-called "police laws" of the state. The enforcement of these laws was delegated to the states by the Federal Constitution. These govern the health, safety and general welfare of citizens. Accordingly, with forty-eight states, a variety of opinions and laws exists, yet through the influence of the Federated State Boards a uniform agreement makes practically uniform education throughout the country.

At present the demand for admission far exceeds the capacity of schools. In Indiana, for example, for the past several years only one applicant out of six is selected. This naturally means

that the record of the applicant is examined carefully and that it determines his selection.

Prospective students should know the requirements when they enter high school in order that courses may be chosen which will admit them to the university or college. Their study should be thorough, for it means that a low grade student will miss his chances for selection, which is truly a "survival of the higher marks".

Medical education in the United States has been standardized generally in the past few years. However, there is a condition of unrest and various changes are occurring, either by legislative enactment, or by the schools themselves.

The Association of Medical Colleges and the Federated State Boards agreed a number of years ago on the "minimum requirements" which should govern the admission of applicants to medical schools. These are as follows:

Four years in high school.

Two years at least in a recognized college or university with a prescribed number of hours in chemistry, physics and biology.

Many applicants present three or four years' credits in college, the latter conferring degrees of Bachelor of Science or Arts.

A few medical schools require a degree before admission, and include in this a definite number of hours in modern languages and science. This action, of course, is of their own accord, since the relations between student and college are purely contractual.

In some states either by legislative action or by rule of the licensing board, a year of intern service is required, and in Illinois a diploma is not given until after the intern year.

Then too the school of medicine should be a Class "A" institution. Fortunately there are few unrecognized schools at present, yet there exist several whose diplomas are not recognized by the state boards. Thus it is shown that a prospective student must be well advised before he undertakes the study of medicine.—(W. R. DAVIDSON, M.D., Vanderburgh County Medical Society Bulletin, Vol. 1, No. 8.)

INSTINCT IN SELECTING FOOD

At a recent meeting of a Hoover Child Welfare Follow-up Committee we were amazed to hear a man high in the medical profession of Indiana say that the human mother had no instincts that would aid her in the care of her child. At another time we have heard a speaker say that the human infant has no reliable instincts that will aid it in the battle of self-preservation. How surprising! If true! A lot of these people who are learning about babies from reading in books about them would do well to take a look at the neighbor's baby since of course they have none of their own. The recent experiments of Doctor Davis, of Chicago, in the feeding of children should give these people a lot to think about. The children under Doctor Davis begin at the age of six months to a year to select their own food. They eat what they please and as much of it as they may choose. Amazing as this will seem to mothers and doctors who think that a baby's food must be weighed, analyzed and scientifically balanced the babies get along famously. The children are given a tray containing sixteen small dishes of food. Of course different combinations are made at different meals. The children eat what they please and as soon as a dish is empty it is filled again. Careful record is kept of what each child eats. The very small children of course have to be fed, but their preferences are considered carefully. It is needless to say that the work of Doctor Davis has been much criticized, but it is very significant that many who "came to scoff remained to pray," and as a result her work is being more and more accepted. After all there is not much that is surprising about the fact that the human infant and child like the immature of other species should have instincts which tell it what to eat. Puppies, kittens, calves, colts, etc., eat what they can get and commonly do well on it.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

PAY your medical society dues now. Don't wait to have your county medical society secretary dun you and *don't become delinquent*.

COUNTY medical society secretaries are reminded that State Association dues should be collected promptly and at once forwarded to the executive office.

THE next annual session of the American Medical Association will be held in New Orleans, May 9 to 13, 1932. An early date is selected in order to avoid the warm weather that prevails in the south in June and July.

THE year's index will be found in this issue of THE JOURNAL. Those who bind their journals should do the work now while all the numbers are

available. As long as they last we shall be pleased to send any missing numbers of the year to our regular subscribers.

MANY county medical societies will hold their annual elections some time this month, or at the latest by the first of the year. It should be remembered that a secretary is the most important officer, for he either can make or break any society. Therefore, elect energetic, progressive and tactful secretaries.

AS we often have said before, delinquency in the payment of your medical society dues may prove to be very expensive if you happen to render medical or surgical services during the period of delinquency and those services are made the basis of a malpractice suit. However, avoid delinquency for other reasons which every thoughtful physician must give favorable consideration.

NO matter whether or not we like it, some form of health insurance will be adopted by some of the state legislatures this coming winter, and it is time for medical men individually and collectively to study the question with a view to bringing such influence to bear as will prevent legislation that is ruinous to a program of adequate and competent medical care, and carrying with it reasonable compensation for services rendered.

WE always have been rather grateful to insurance companies for a liberal supply of blotters. Our gratitude now is divided between insurance companies and specialty pharmaceutical houses. We don't suppose that anyone ever reads what is on the blotter, but nevertheless the blotter is very useful. Incidentally, we often have wondered why mercantile concerns waste so much money on blotters and circulars that so frequently find their way into the wastebasket without being read.

WE have come to believe that loyalty is a rather rare attribute, and particularly in times of trial and tribulation. Loyalty should be cultivated, and it is well to remember that when we are untrue to friends and acquaintances we are untrue to ourselves. Let's start the new year right by cultivating greater loyalty to friends, to organized medicine and all that organized medicine represents. If we do this we must give our undivided support to the county, state and national medical organizations.

AN Indianapolis surgeon said to us, "God bless the bootlegger. May he live and prosper," and in explanation of the remark he said that two different bootleggers voluntarily had paid him over three thousand dollars for surgical services within a period of six months when the ordinary charges would not have been one-tenth as much. Well, "come easy, go easy"—and fortunate is the physician or surgeon who gets a slice of these dishonest profits through the rendering of honest professional service.

AS absurd as it may seem demands have been made upon physicians in some localities to apply for a license under the new "chain store" tax law. Albert Stump, attorney for the state association, is of the opinion that such demands are illegal and that even though a physician may dispense his own drugs his office is not a "store" and hence he is not liable for these tax demands, which amount to $8.00 or $9.00 for each individual physician. Mr. Stump's complete opinion appears in this number of THE JOURNAL under the Medico-Legal Department notes.

MAINE has attempted through the Code Bill to give medical control of medical affairs. This is the idea of placing responsibility where it belongs, in the hands of the men trained to assume that particular responsibility. The long established practice of constituting lay boards as trustees of public and private institutions, with the sole authority to hire and fire hospital directors and employees, and in like manner to control the policy and management of these institutions, has proved to be inconsistent with the highest aims of the profession and incapable of rendering the greatest good to the public. Abolish lay boards in medical enterprises.

CONCERNING this question of ballyhoo for medical men, as practiced by some of the prominent physicians and surgeons of the United States who directly or indirectly receive extensive and flattering recommendations of qualifications and accomplishments, we believe that it is time to come to a decided and emphatic decision as to whether or not we are going to live up to our traditions and ethics. If the really big men of the profession are to be permitted to ballyhoo for themselves, then by all means we should abolish our code of ethics and unquestionably permit the little fellow to ballyhoo for himself if he elects to adopt a practice so objectionable and in such bad taste.

THE Principles of Medical Ethics adopted by the American Medical Association and practically all state and county medical societies of the country are worth following by every so-called reputable physician in the land, and yet we oftentimes feel that the Code of Ethics is nothing but a scrap of paper which receives scant support from many physicians as rules of conduct in the practice of medicine. We should make up our minds to either enforce the code of ethics or scrap the whole thing. Whenever we discipline or penalize a few members for flagrant violations of all of the rules of medical ethics as well as common honesty, then and then only will our Code of Ethics amount to something and be respected.

A MAN who steals a ham to feed a starving family usually gets five to twenty years in prison as punishment, but a thug may hold you up, steal from you several thousand dollars in money if you have that much, then murder you and two or three other innocent people during the episode, and may be set free by a sympathetic and misguided jury. Likewise we discipline or penalize the "little fellow" in the medical profession for commercialism or a breach of our prized (?) Code of Ethics, but the "big shot" in the profession is guilty of the same things to a far greater degree and with more boldness and we say nothing about it. Isn't that a fine system? It is about time for us to change the order of things and make the punishment fit the crime, with no respecter of persons.

DESPITE all warnings, there is scarcely a month goes by without hearing that one or more Indiana physicians have been victimized or badly treated by insurance companies that are not well established, not well financed, and whose methods of operation are open to criticism. When you need protection from insurance you usually need it badly, and that is the time when you can thank your good fortune if you hold an active policy in one of the old and well-established companies that has built up a reputation for honorable and fair dealing. Usually it costs a little more to get something good, but it pays in the long run, and above everything else we would like to advise Indiana physicians to buy insurance the definite cost of which is fixed and not subject to assessments.

FROM an exchange we learn that the recent illness of King George V of Great Britain cost the royal exchequer about $200,000. The leading medical adviser, Lord Dawson of Penn, presented a bill for $50,000, and Stanley Hewitt received $2,500 a month. Even the bacteriologist had a bill for $10,000, and the roentgenologist received $10,000 for a few x-ray treatments. The nurses received a bonus of $500 each when they were dismissed. The ventilating system for the royal bedchamber cost $20,000. When the majority of our English confreres who are having difficulty in making both ends meet learn of the enormous fees paid to two or three medical attendants upon the King it seems to us that there must be a little envious feeling developed.

DURING times of depression, malpractice suits are more frequent. People who meet with reverses and who are having a hard time to get along always can find excuses for the nonpayment of bills. Likewise, there are many persons who are more than usually anxious to secure something for nothing. To some people a malpractice suit against a doctor looks like easy money, and particularly when some shyster lawyer is willing to take the case on the basis of no legal fee if no judgment is secured. There never is any good excuse for the physician to become delinquent in the payment of his medical dues, but right now, with increased possibilities of unwarranted malpractice suits brought against any physician there is very good reason for prompt payment of medical society dues which, of course, pays for medico-legal protection.

A MAN called up an ear specialist and said, "What do you charge for treating an abscessed ear?" To which the physician replied, "That depends upon what treatment is required." "Well, what do you charge for examining an ear?" said the prospective patient. "Well," said the physician, "that depends somewhat upon the nature of the examination and the requirements in determining the trouble and what to do for it." "All ears are alike and the treatments and examination should be alike in price," said the patient. To which the physician responded, "All ears are not alike—any more than all chickens are alike. Some chickens are black, some are white and some are roosters. Some crow while others only cackle." It turned out that the prospective patient was notoriously overbearing and exacting, and as so frequently occurs with such patients he had a reputation in many quarters as being a "dead beat".

RECENTLY we received a small instrument from abroad. Its cost, including transportation charges, was between five and six dollars. Added to this bill was a tariff charge of $2.80. If that sort of thing doesn't make your blood boil we much mistake the temper of the average physician. Why do we have such an exorbitant tariff to protect the few instrument manufacturers in the United States who already make enormous profits on everything they are selling. This tariff gouging in the traffic of surgical instruments affects 150,000 physicians and is in a sense reflected to the lay public. We believe in a protective tariff to protect the American workman, but we do not believe in a tariff that is highway robbery, nor in one that is wholly in the interests of a very limited number of manufacturers who without the tariff could make enough money in competing with foreign manufacturers.

IN several tropical countries there are plants which are poisonous to fish, and the United States Department of Agriculture has discovered that these fish-poison plants may produce an ideal insecticide. The poison is known as rotenone. The natives prepare an extract from the root and pour it into a stream. Even with such a wholesale dilution the fish become intoxicated or stupefied. The primitive fishermen then gather them in. Though this root has a rapid and certain effect on fish, experiments have shown that it is harmless to warm-blooded animals when taken by mouth. The

Department of Agriculture chemists are seeking for a source of supply for rotenone in plants that can be produced in the United States, thus keeping the nation independent of any other country for a supply. It is thought that the root may be grown in Porto Rico, in the Philippines, and possibly in the Virgin Islands and the southernmost parts of the United States. While as yet no experiments have been carried out it is thought that this root may be of value in medicine in destroying certain bacteria and parasites.

LOS ANGELES has a plan for the medical care of low-salaried workers. By agreement it recently has been adopted by the Los Angeles County Medical Association and the Metropolitan Water District of Southern California which latter covers a large area, including eleven cities. The plan is worthy of study and consideration by medical organizations in every part of the country, and it is fortunate that the medical profession in Southern California has come to an agreement with a large corporation which has to do with a large number of people connected with the building of an aqueduct to bring water from the distant Colorado River. It should be remembered that in every populous community the medical profession is confronted with the problem of supplying adequate and trustworthy attention to the low-salaried individual at a price which he can pay, and it is time for medical men to meet this problem with a solution that is fair to all concerned and not permit laymen to thrust upon us a plan that is objectionable from every standpoint.

WE have been told that the drugless healers in Indiana, notably the chiropractors and naturopaths, will attempt to obtain osteopathic recognition and diplomas by taking osteopathy by mail, and upon the receipt of a diploma such offenders will be permitted to practice obstetrics in Indiana. It is said that the mail course requires no study of consequence, the principal thing being the payment of fees which, in due course of time, brings forth a diploma. The drugless healers are not flaunting their diplomas, but merely attaching "Dr." to their names and letting it go at that. They are rather dangerous, for instead of making a bid for the chronics and neurotics they now are trying to handle acute cases such as appendicitis and other dangerous infections, with the result that they are keeping a number of persons from prompt medical attention who should receive it. We notice in the circular letter that has been sent out that fifty dollars is paid to members of the chiropractic profession who refer students to the new institution.

MERRY Christmas and a Happy New Year! And don't forget that if you cannot afford turkey during the holidays you may find that ham and eggs are nourishing, cost less, and you can be happy on that holiday diet and be ahead of the game financially. Speaking of happiness, we are reminded of McIntyre's story of a woman in New York who formerly lived at an expensive hotel, owned a flock of high-priced motor cars, and lived the life of an active but dissipating rich woman but finally lost husband, fortune, and as a last resort was forced to take a position as an efficeint stenographer, thus returning to the place in society occupied before she married wealth. One of her former friends tried to console her because of the drop in social and financial position, but she replied, "I never was happier in my life than I am right now, and I never was more miserable than when I apparently had everything that heart could wish. I sincerely regret the loss of my husband, who was affectionate, kind and indulgent, but I have no regrets for the loss of the financial standing he gave me." In these times of depression, when perhaps we are forced to do without many of the luxuries we formerly had, it is well to remember the old song that you can be happy though poor, and if we have the comforts of life we can well afford to do without the luxuries.

A WELL-KNOWN Fort Wayne evangelist, heard frequently over the radio, who drew large crowds to his tabernacle and who publicly made a mockery of scientific medicine and urged people to avoid physicians, recently has lost his life apparently through following the advice he so often preached. He was attacked by acute appendicitis, for ten days followed the advice that he so often had preached, and then eagerly sought medical aid. An operation was performed in the hope of saving his life, but it is reported that the appendix had ruptured, general peritonitis had been established, and within a few hours the patient was dead. There is little doubt that had he received prompt attention he would have been living today. It is a well-known fact that in the past many of his followers have paid a severe penalty as a result of following his teachings, and it is the irony of fate that those same teachings apparently were responsible for his death in an attempt to live up to them. Just what effect this example will have upon a lot of people who irrationally and inconsistently snapped their fingers at the possible results brought about through delay in adopting and putting into effect established and trustworthy knowledge remains to be seen, but it is quite likely that there will be not a few who will continue in a fanatical way to pursue the road to self-destruction despite all warnings. Religion is a hollow mockery when put to such base uses.

SOME do's and don'ts concerning the subject of threatened malpractice suits are given in a very instructive article in the *New England Journal of Medicine* for April 16, 1931. Among other interesting items we note the following: "A fluoroscope has its place, no doubt, but in diagnosing

fracture and discerning apposition there is no substitute for an x-ray. The x-ray is evidence that can be produced. It is concrete. What you saw in the fluoroscope was happening at the time, but it cannot be produced to prove that you got apposition when later the patient removes his cast without your knowledge or does some other act that causes loss of apposition. Here is another timely suggestion: "Please don't criticize, particularly to the patient, the treatment given by some other doctor before the patient came to you. You see the result, nothing more. You do not know the whole story. You do not know what the original condition was, what the other man encountered in the way of difficulties or whether he had proper cooperation from the patient. Wait until the evidence is all in. You may have to change your mind when you get all the facts. You may be wiser but at least you will know what you are talking about." To this we may add the injunction to be careful about what you say and to whom you say it, for in an unguarded moment you may give to a relative, or even a lawyer, a club that later will be used to beat you, and always remember that there are plenty of people who are trying to get something for nothing and it is easy to attempt to blackmail a physician and force him to pay indemnity for an alleged malpractice. Last but not least, if you are threatened with a malpractice suit then get in touch with the medico-legal department of the Indiana State Medical Association at once.

MEDICO-LEGAL DEPARTMENT

Albert Stump

ATTORNEY FOR THE INDIANA STATE MEDICAL ASSOCIATION

INDIANAPOLIS

Question: Must a physician who fills his own prescriptions pay the store license fee provided for under Chapter 207 of the Acts of 1929?

Answer: Since the decision of the Supreme Court of the United States has established the validity of the Acts of 1929, requiring licenses for the operation of stores in Indiana, which Act is known as the Chain Store License Act, the supervisor of the collection of the store license fees has sent out the approved blank for the report and collection of those fees, and in some districts of the state the physicians have been included by the district collectors in the lists to whom such blanks were sent. The receipt of these blanks of course has at once raised the question with the physicians receiving them whether or not a physician filling his own prescriptions comes within the meaning of that Act.

The Act provides that "It shall be unlawful for any person * * * to operate, maintain, open or establish any store in this state without first having obtained a license so to do from the State Board of Tax Commissioners."

Section 8 of the Act defines the term "store" "to mean and include any store * * * or mercantile establishment * * in which goods, wares or merchandise of any kind are sold, either at retail or wholesale".

A store is defined in Webster's International Dictionary as "any place where goods are kept for sale, whether by wholesale or retail".

This generally accepted definition is impliedly followed in the statute governing the practice of pharmacy. In Burns' Annotated Indiana Statutes 1926, Section 13847, it is made unlawful "for any person to conduct a store or pharmacy in which is sold at retail * * any chemical, drug or medicine which is poisonous * * * or to compound for sale at retail any physician's prescription, unless there be in charge a registered pharmacist". That Act contains the proviso, "that nothing in this Act shall apply to, nor in manner interfere with, the business of a regularly licensed physician in compounding for and supplying his patients with such medicines as may seem proper in his professional capacity as a physician". Thus the law recognizes that where prescriptions are filled for another the person filling such prescriptions is operating a store.

But where the physician fills his own prescriptions and supplies his own medicines he is doing that only as an incident to and a part of the service he renders in the practice of medicine. The practice of medicine is defined in the statutes (Burns' Annotated Indiana Statutes 1926, Section 12243) in part as follows: "To give surgical assistance to, or to heal, cure or relieve, or to attempt to heal, cure or relieve those suffering from injury or deformity, or disease of mind or body * * * shall be to engage in the practice of medicine". The means with which one renders the service covered by the definition of the practice of medicine are not limited by the statute. Therefore, whatever means one employs so long as it is incident to the practice would not have the effect of making his act some other thing than the practice of medicine. Having a license to engage in that practice the means which he may employ to accomplish the result desired is not limited by law.

If the doctor engaging in the practice of medicine also filled prescriptions for other physicians or sold medical supplies to other physicians as a regular business, and catered to the general public in furnishing such commodities, then of course he would be operating a store, as that term is used in the statute. Where, however, he dispenses medicines and other medical and surgical supplies only as incident to his professional services he is not operating a store but is only engaged in the practice of medicine.

This statute has not been tested by any litigation for the construction of the points involved in this article but we are confident that this construction would be upheld by the courts.

DEATH NOTES

J. A. MURAT, M.D., of Vevay, died November 12th, aged eighty years. Dr. Murat graduated from the Medical College of Ohio, Cincinnati, in 1881.

CHARLES N. BROWN, M.D., of Fairmount, died November 20th, aged sixty-five years. Dr. Brown was a graduate of Bennett Medical College, Chicago, in 1897.

W. A. OCKER, M.D., of Indianapolis, physical director in the Indianapolis public schools, died November 13th, aged sixty-one years. Dr. Ocker graduated from the Cincinnati College of Medicine and Surgery in 1897.

M. S. MCCORMICK, M.D., of Martinsville, died November 6th, aged seventy-two years. Dr. McCormick had retired from the active practice of medicine a few years ago. He was a graduate of the Medical College of Ohio, Cincinnati, in 1882.

ULYSSES GRANT POLAND, M.D., of Muncie, died November 11th, aged sixty-six years. Dr. Poland graduated from the Medical College of Indiana, Indianapolis, in 1895. He was a member of the Delaware-Blackford County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

WILLIAM H. MUELCHI, M.D., of Tell City, died suddenly November 20th of acute dilatation of the heart. At the time of his death Dr. Muelchi was president of the Perry County Medical Society. He was a member of the Perry County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from Rush Medical College, Chicago, in 1891.

AUSTIN N. LAKIN, M.D., of State Line, Indiana, was fatally wounded November 24th. Dr. Lakin was sixty-nine years of age. He was a member of the Warren County Medical Society, the Indiana State Medical Association, the Illinois State Medical Society, and the American Medical Association. He graduated from the Bennett Medical College in 1905 and from the Illinois Medical College, Chicago, in 1906.

F. A. ZELLER, M.D., of Union City, died in Visalia, California, November 14th. Dr. Zeller was sixty-one years of age. He served in the medical corps of the United States Army during the World War, and was a member of the Randolph County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Ohio Medical University at Columbus in 1898.

J. MATTHEW PULLIAM, M.D., of Fort Wayne, died from a self-inflicted gunshot wound November 30th. Dr. Pulliam was a widely known specialist in neuropsychiatry, and for many years had operated a private sanitarium in Fort Wayne. He was a member of the Fort Wayne Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the George Washington University Medical School at Washington, D. C., in 1901.

L. D. BROSE, M.D., of Evansville, prominent eye, ear, nose and throat specialist, died November 15th. Dr. Brose was seventy-two years of age. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association and of the American College of Surgeons, a member of the American Academy of Ophthalmology and Otolaryngology and had received the certificate of the American Board for Ophthalmic Examinations. He graduated from the University of Pennsylvania School of Medicine, Philadelphia, in 1881.

U. G. SOUDER, M.D., of Auburn, died November 24th, aged sixty-five years. Dr. Souder had been ill for several weeks. His new hospital, the Dr. Bonell Souder Hospital, in Auburn, had been dedicated only recently. He was a member of the DeKalb County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the University of Illinois College of Medicine, Chicago, in 1902. Dr. Souder was active in politics and had served two terms (1918-1922) as chairman of the DeKalb County Republican Central Committee. He was a member of many fraternal and social organizations.

NEWS NOTES AND PERSONALS

DR. J. R. NASH, of Plymouth, has assumed the practice of the late J. H. Ravenscroft, at Albion.

C. N. BAGANZ, M.D., has announced the opening of an office in Uniondale.

THE Wabash County Medical Society met at the Wabash Country Club, October 1st.

DR. AND MRS. O. L. STOUT, of Upland, celebrated their golden wedding anniversary October 27th.

Dr. J. Whitridge Williams, professor of obstetrics in Johns Hopkins University, died recently.

The regular monthly meeting of the Shelby County Medical Society was held November 4th, at Shelbyville.

A. A. Case, M.D., retired physician of Akron, Indiana, celebrated his ninety-ninth birthday November 7th.

The Carroll County Medical Society held its regular meeting November 13th. Dr. Louis Segar, of Indianapolis, was the principal speaker.

The Greene County Medical Society met at Linton, November 12th. Dr. Elmo Moses, Worthington, presented a talk on "Constipation".

Dr. Grace Besh, of Marion, and Mr. Walter Boyer, of Marion, were married recently. Dr. Besh is associated in practice with Dr. Nettie Powell.

Dr. E. L. Cartwright, of Fort Wayne, has announced his absence from practice for a few weeks while taking special work in New York City.

The Randolph County Medical Society met at Winchester, November 9th. Papers were presented by Dr. J. A. Albright, Dr. I. E. Brenner, and Dr. Russell Engle.

Dr. F. C. Walker, of Indianapolis, presented a paper on "Pelvic Cellulitis" before the Hendricks County Medical Society at Danville, November 20th.

The Ripley County Medical Society met at Batesville, October 7th, at the Country Club. The ladies' auxiliary of this society met at the same time and place.

The Montgomery County Medical Society met in Crawfordsville, November 19th. Dr. Mothersill, of Indianapolis, presented a paper on "Recent Research in Anemias".

This issue of The Journal carries an advertisement for the Texas Sunbeam Orchards, which business organization is managed by the wife of a physician.

The Floyd County Medical Society met at the Public Library, New Albany, November 13th. Dr. Wallace Frank, of Louisville, presented a talk on "Cancer".

Miss Katherine Zoe Hall, formerly of Indianapolis, and Dr. W. T. Partch, of Evansville, were married November 28th, and have gone to the state of Washington to reside.

The Fountain-Warren County Medical Society met November 5th, at Hillsboro. Dr. Robert S. McCaughey, of Danville, Illinois, presented a paper on "Disease of the Colon".

Drs. Jewett Reed and Larue Carter, of Indianapolis, discussed "Head Injuries" at the October 29th dinner meeting of the Montgomery County Medical Society at Crawfordsville.

The Terre Haute Academy of Medicine held a dinner-meeting at the Deming Hotel, December 4th. Dr. Rock Sleyster, of Wauwatosa, Wisconsin, spoke on "Psycho-neurosis in General Practice".

"Pelvic Infections" was the subject of a paper presented by Dr. F. C. Walker, of Indianapolis, before the Rush County Medical Society, at Rushville, November 2nd. A banquet preceded the scientific program.

The Gibson County Medical Society met at the Methodist Hospital, Princeton, November 9th. Dr. Herman Baker, of Evansville, presented a paper on the "Diagnosis and Treatment of Coronary Heart Diseases".

The historic Warner Observatory, of Rochester, New York, has been destroyed and a smooth lawn will occupy the site. The Observatory formerly was used by Dr. Lewis Swift, who won fame for his discoveries of nebules and comets.

The Owen County Medical Society held a meeting at Cooper's Tavern, Spencer, Indiana, October 16th, at noon. There was a general discussion of medical problems, and a discussion of control of communicable diseases and township practice.

Drs. Frank Rodenbeck and Earle Shockney, of Arcadia, entertained the members of the Hamilton County Medical Society, November 10th. Mr. Albert Stump, of Indianapolis, was the speaker, his subject being "Medical Jurisprudence".

The Marshall County Medical Society met at the Marshall County Hospital, Plymouth, November 25th. This was a business meeting to complete the organization of the society. Fourteen members were present.

The American Dental Association in its convention at Memphis, Tennessee, in October, decided to advertise, not in a commercial or individualized manner, but publicity on a high plane devoted to dental education.

DR. LACEY L. SHULER, of Indianapolis, addressed the members of the Elwood Medical Society, at Elwood, November 10th. His subject was "Diseases of the Bones".

DR. JOHN W. SLUSS, of Indianapolis, was wounded while on a hunting trip in Kansas. His gun was accidentally discharged, wounding his hand. Dr. Sluss was in a hospital in Stafford, Kansas, for a few days, and returned to his practice November 6th.

DR. R. W. MCNEALY, of Chicago, addressed the Academy of Medicine of Terre Haute, November 6th. His subject was "Surgery of the Blood Vessels, Past and Present", and lantern slide illustrations were used.

THE Tippecanoe County Medical Society met at the Home Hospital, Lafayette, November 12th. A clinic was held in the afternoon, concerning "The Management of Edema". Dr. Charles A. Eliott, of Chicago, presented a paper on "Circulatory Failure in Acute Infectious Diseases".

DR. THURMAN B. RICE, of Indianapolis, addressed members of the LaPorte County Medical Society at the Rumely Hotel, LaPorte, October 15th. His subject was "Recent Advances in Bacteriology". Twenty-four members and nineteen guests attended the meeting.

THE American Board for Ophthalmic Examinations will hold an examination in New Orleans on Monday, May 9, 1932, at the time of the meeting of the American Medical Association. Applications for this examination may be procured from the secretary, Dr. William H. Wilder, 122 South Michigan Avenue, Chicago.

A NEW unit, built to house one hundred male patients, has been opened recently at the Central State Hospital, Indianapolis. This is the second unit in the replacement building program for this hospital. This unit will house fifty-two patients in single rooms and forty-eight in four dormitories of twelve beds each.

THE Ripley County Medical Society met at Osgood, November 4th. Lowell Hunter, M.D., spoke on "Surgery of the Sympathetic". Following the scientific program there was a discussion of the possibilities of organizing a bi-county or tri-county society, and Dr. Stemm, of North Vernon, told of their tri-county society.

THE Adams County Medical Society met November 6th at Decatur. Dr. C. C. Rayl, of Decatur, gave a report concerning the meeting of the Interstate Postgraduate Assembly. There was a general discussion of medical poor relief and measures to be undertaken in Adams county this winter.

DR. LOUIS SEGAR, of Indianapolis, talked on "Care and Feeding of the Infant" at the October 13th meeting of the Fayette-Franklin County Medical Society, in Connersville. At the November 10th meeting of the society, Dr. Elsie Asbury, of Cincinnati, Ohio, presented motion pictures of treatment of arm and leg fractures.

THE Porter County Medical Society met at Valparaiso, October 27th. Dr. A. G. Miller, of Hobart, presented a paper on "The Aschheim Zondek Test for Early Pregnancy" with report of 150 cases, and Dr. R. L. Sensenich, of South Bend, talked on "Some Simple Measures in the Management of Common Digestion Disturbances".

THE Jasper-Newton County Medical Society met at the residence of Dr. A. R. Kressler, Rensselaer, October 30th. Dr. D. C. McClelland, of Lafayette, talked on "Irradiation Treatment of Benign Uterine Hemorrhage", discussing the indications for the use of x-ray and radium in the treatment of menorrhagia and fibroids.

"THE History of Medicine" and "The History of Dentistry" were subjects of papers presented by Edgar F. Kiser, M.D., of Indianapolis, and J. T. Waldo, D.D.S., before the November 6th meeting of the Hancock County Medical Society, at Greenfield. The dentists of the county met with the members of the medical society.

THE October 29th meeting of the Dearborn-Ohio County Medical Society was held at the King Hotel, Lawrenceburg. E. L. Libbert, M.D., presented a plan for the care of the indigent sick. There followed a general discussion of the plan and a special committee was appointed to make investigations of plans for caring for indigent sick in that community.

THE Lawrence County Medical Society met at the Bedford Country Club, November 4th. Dr. C. L. Rudesill, of Indianapolis, talked on "Diet in Gastro-Enterology". There was a detailed discussion of the care of the indigent sick, and a policy was adopted to coincide with suggestions of the State Relief Committee. Attendance at this meeting was twenty-one.

A CERTIFICATE of appreciation and recognition was awarded Dr. William A. Doeppers, formerly superintendent of the City Hospital, Indianapolis, by the Public Health Board of Indianapolis, November 27th. After serving five years as hospital superintendent, Dr. Doeppers resigned in July and accepted a position with the medical research staff of Eli Lilly & Company.

Dr. Willis D. Gatch, of Indianapolis, acting dean of the Indiana University School of Medicine, spoke before the monthly dinner meeting of the Indianapolis Dental Society, November 2nd. His subject was "The Problem of Dental Sepsis from the Medical Standpoint".

Officers were elected at the annual dinner of the Alumni Association of the Central College of Physicians and Surgeons, October 20th, in Indianapolis. Dr. William H. Larabee, New Palestine, was made president; Dr. Charles A. Haefner, Andover, Ohio, honorary president; Dr. James A. Cummins, Madison, vice-president; and Dr. Lillian C. Lowder, Indianapolis, secretary.

At the November 12th meeting of the Tippecanoe County Medical Society at the Home Hospital, Lafayette, Dr. Charles A. Elliott, of Chicago, presented a paper on "Circulatory Failure in Acute Infectious Diseases". A clinic was held in the afternoon, with "Edema" as the subject considered. Attendance at the clinic was thirty, at the dinner fifty, and at Dr. Elliott's address, seventy-five.

The October issue of *World's Work* includes a story of the House of Squibb, the story of a business grounded in integrity and continuing through three-quarters of a century in strict conformity with the principles of its founders. The story brings out the fact that this firm has twice been cited by the U. S. Government for its distinguished service.

The Wayne-Union County Medical Society met at Richmond, November 6th. This was a dinner meeting at the Richmond Leland Hotel. Moving pictures were shown and papers presented covering the subjects (1) "Anatomy of Female Pelvis and Perineum", (2) "Abdominal Subtotal Hysterectomy for Fibroids" and (3) "Repair of Urethrocele, Cystocele and Laceration of the Cervix".

Dr. C. O. McCormick, of Indianapolis, addressed the International Congress of Anesthetists at the recent convention in New York City. His subject was "Popularizing Rectal Ether Analgesia in Obstetrics". Subsequently Dr. McCormick was invited by Dr. J. T. Gwathmey, originator of obstetrical rectal ether analgesia, to speak before the visiting and nursing staffs of the New York Lying-in Hospital and demonstrate his method of the rectal instillation.

Dr. Carl A. Hedblom, of Chicago, presented an address on "Abscess of the Lung and Its Treatment" at the November 19th meeting of the Laporte County Medical Society, in Michigan City. Dr. P. G. Skillern, of South Bend, opened the discussion of the paper. Members of the Executive Committee of the Indiana State Medical Association attended this meeting to assist in making plans for the 1932 session of the Association.

The Rush County Medical Society met at the Hotel Bebout, Rushville, November 2nd. Dr. F. C. Walker, of Indianapolis, presented the principal address. Election of officers for the coming year resulted as follows: Dr. H. P. Metcalf, Rushville, president; Dr. George B. McNabb, Carthage, vice-president; and Dr. Roy Shanks, Rushville, secretary-treasurer. Dr. C. C. Atkins, of Rushville, was named delegate to the State Association.

The sixtieth annual session of the Indiana Society for Mental Hygiene was held December 7th at the Claypool Hotel, Indianapolis. The principal speaker was Dr. C. M. Hincks, medical director of the national committee for mental hygiene, New York. Other out-state speakers were Dr. Sidney D. Wilgus, Springfield, Illinois; Dr. Emerson A. North, Cincinnati; Dr. Paul L. Schroeder, Chicago; and Dr. John A. Larson, Springfield, Illinois.

The Fifth District Medical Society and the Vigo County Medical Society met at St. Anthony's Hospital, Terre Haute, November 10th, with an attendance of sixty. Dr. J. H. Weinstein, of Terre Haute, talked about the Shoulders Resolution; Dr. James Spigler talked on "Abnormal Intestinal Rotation" and presented a motion picture on spinal anesthesia. Officers were elected: Dr. F. C. Dilley, Brazil, president; Dr. C. S. Carmichael, Seelyville, vice-president; and Dr. F. E. Sayers, Terre Haute, secretary-treasurer.

The St. Joseph County Medical Society met at South Bend, November 18th. Papers were presented by Joseph A. Johnston, M.D., of Detroit, on "Infant Feeding"; Norman F. Miller, M.D., of Ann Arbor, on "Bleeding During Third Trimester of Pregnancy"; Raphael Isaacs, M.D., of Ann Arbor, on "Diagnosis and Treatment of Anemia"; Kellogg Speed, M.D., of Chicago, on "Unhappy Results in Treatment of Fractures"; and James B. Herrick, M.D., of Chicago, on "Recurrent Malignant Growths as Seen by the Internist".

Mrs. E. D. Thixtun, widow of Dr. Thixtun, of Gosport, Indiana, writes that her husband's office is for sale. She says the furnishings, drugs and everything are ready for a man who may want to locate in Gosport. "The drugs are standard and a large case of instruments, dressings, lights and all that is needed for a man to start are on hand. If any man desires to come here

we will gladly sell him just what he needs or what he can use. Gosport has 9,000 population with a good surrounding territory." For further details write to Mrs. E. D. Thixtun, Gosport, Indiana.

THE Seventh District Medical Society met at Franklin, October 28th. Members from Marion, Morgan and Hendricks counties were guests of the Johnson county members. At the banquet, Dr. Irvin Abell, of Louisville, Kentucky, spoke on "Primary Multiple Malignant Growths". Other speakers were Dr. F. S. Crockett, of Lafayette, and Dr. Weinstein, of Terre Haute. Dr. Ernest Rupel, of Indianapolis, was elected president of the society to succeed Dr. A. S. Jaeger; Dr. C. B. Thomas, Plainfield, was made vice-president, and Dr. Edward M. Pitkin, of Martinsville, secretary-treasurer. At the afternoon session papers were presented by Dr. A. S. Jaeger, of Indianapolis; Dr. C. M. Pitkin, of Martinsville; Dr. J. A. Craig, of Greenwood; Dr. H. H. Wheeler, of Indianapolis; and Dr. R. N. Harger, of Indianapolis. During the afternoon the ladies were guests at the home of Mrs. Carl Payne, where Dr. Thurman B. Rice talked on "Health Fads". Mrs. W. E. Tinney, of Indianapolis, spoke on the work of the Auxiliary.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Lederle Laboratories, Inc.:
Diphtheria Toxin-Antitoxin Mixture (0.1 L+), 3 syringe packages.
Pollen Antigens-Lederle, Series D packages.
Prostrate Pigweed Pollen Antigen-Lederle.
Summer Cypress Pollen Antigen-Lederle.
Thromboplastin Local-Lederle.

H. K. Mulford Co.:
Tuberculin Intracutaneous (Human Type), 3 cc. vial packages.
Tuberculin Intracutaneous (Bovine Type), 3 cc. vial packages.

Parke, Davis & Co.:
Glaseptic Ampoules Solution Glucose, 50 per cent, 100 cc.
Scarlet Fever Streptococcus Toxin for Preventive Immunization-P. D. & Co., six 1 cc. vial packages.
Typhoid-Paratyphoid Vaccine (Prophylactic) ten 2½ cc. vial packages.
Typhoid Vaccine (Prophylactic), ten 2½ cc. vial packages.

E. R. Squibb & Sons:
Neocinchophen-Squibb:
Tablets Neocinchophen-Squibb, 5 grains.

Frederick Stearns & Co.:
Synephrin Tartrate-Stearns:
Synephrin Tartrate Solution, 3%.
Synephrin Tartrate Solution, 5%.
Synephrin Tartrate Emulsion Plain.
Synephrin Tartrate Emulsion Compound.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1931, p. 477):

Arzol Chemical Co.:
Silver Nitrate Applicators (Silver Nitrate 75%).

E. R. Squibb & Sons:
Cinchophen-Squibb.

INDIANA UNIVERSITY NEWS NOTES

THE Indiana University board of trustees has accepted the resignation of Mrs. Ethel P. Clarke as director of the Indiana University Training School for Nurses, Indianapolis.

DR. WILLIS D. GATCH, acting dean of the Indiana University School of Medicine at Indianapolis, submitted a report of matters of the medical school at the November 21st meeting of the I. U. board of trustees. Dean Gatch was highly complimented by the board for the excellency of his work.

MISS MARY ELIZABETH MATHEWS, who graduated last June from the Indiana University Training School for Nurses at Indianapolis, has been appointed assistant supervisor of the nursing staff of the James Whitcomb Riley Hospital, Indianapolis. Miss Mathews has been assigned to the ear, nose and throat division.

DR. GLADYS FRITH, psychologist and lecturer in psychology in the Indiana University extension center at Indianapolis, spoke at the November meeting of the Michigan City branch of the American Association of University Women. Dr. Frith also is director of the psychology clinic of the James Whitcomb Riley Hospital at Indianapolis.

DR. WILLIS D. GATCH, acting dean of the Indiana University School of Medicine at Indianapolis, spoke at the November monthly meeting of the Indianapolis Dental Society on "The Problem of Dental Sepsis from the Medical Standpoint". The meeting was held at the Hotel Washington with nearly 100 members in attendance. Dr. E. S. Gilchrist, president of the organization, presided.

THE three Indiana University hospitals located in Indianapolis served 1,980 people during the month of October. Six hundred and ninety-one of this number were patients confined to the hospitals, while 1,289 were out-patients. The James Whitcomb Riley Hospital took care of the largest num-

ber of patients, having 270 bed patients and 700 out-patients. The William H. Coleman Hospital for women came second with 509, representing 262 bed patients and 247 out-patients. The Robert W. Long Hospital, the third of the I. U. group, served 501 people, 159 bed patients and 342 out-patients. The daily average for the three hospitals was 399.7. During October of 1930, 1,913 patients were cared for by these hospitals. Six hundred and seventy of them were bed patients and 1,243 were out-patients.

DIPHTHERIA DEATHS IN INDIANA OCTOBER, 1931

(Continued from page 668)

of November will be excessive. We are very much afraid that the hopes of a new record again in 1931 are going glimmering. As long as two years ago the writer pointed out that we would do very well indeed if we held down diphtheria during the years 1932 and 1933. The reason for such a prophesy is that diphtheria has shown a very strong tendency to show an increase at intervals of about six years and 1932 would be such a year. We do not mean that the increase is inevitable, by any means, however. Diphtheria can be held down just as well this year and next as it could two years ago if the same amount of effort will be put into the work. *Now* is the time to give thought to the matter of preventing diphtheria. *Now* is the time that diphtheria prevention work is most needed.

An analysis of the eighteen deaths for the month of October reveals that Delaware county had four, Lawrence and Allen counties two deaths each. All three of these counties and particularly Allen and Delaware have been sufficiently warned that they have an important epidemic in their midst. Allen and Delaware counties have been reporting large numbers of cases for months. In our way of thinking there is no excuse for having allowed the epidemic to run along as it has. Delaware county has had seven deaths in the first ten months in the year and now has the highest rate of any county in the state. If this county were not a well-to-do county with a thriving city, we would be more inclined to excuse it. As it is we believe that there has been criminal negligence and as a result these children have died unnecessarily.

Interesting is the distribution of diphtheria in the state at the present time. The cases and deaths are practically all found in a broad band which extends diagonally across the state from Fort Wayne to the "pocket". The disease is at the present spreading to adjoining counties and unless something is done we are soon going to have nearly every county in the state involved.

Counties having deaths during October and the year are given below. Jay and Owen counties enter the black list for the first time each with one death.

County	Total for 1931	October, 1931	County	Total for 1931	October, 1931
Allen	4	2	Lake	5	0
Bartholomew	1	0	Laporte	1	0
Brown	1	0	Lawrence	5	3
Carroll	1	0	Madison	6	0
Cass	1	0	Marion	4	2
Clark	2	0	Marshall	2	1
Crawford	2	0	Martin	3	1
Dearborn	2	0	Monroe	1	0
Delaware	7	4	Montgomery	1	0
Fayette	2	0	Newton	1	0
Franklin	3	1	Orange	1	0
Gibson	2	1	Owen	1	1
Grant	2	0	Perry	2	0
Green	1	0	Ripley	3	0
Hamilton	1	0	Stark	1	0
Hendricks	1	0	St. Joseph	1	0
Henry	3	0	Sullivan	1	0
Howard	2	0	Vanderburgh	2	1
Huntington	2	0	Vigo	1	0
Jay	1	1	Whitley	1	0
Knox	1	0		—	—
LaGrange	1	0		86	18

SOCIETY PROCEEDINGS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

October 21, 1931.

Meeting called to order at 3:45 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D.; E. D. Clark, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held October 13 read and approved.

Dr. Edmund D. Clark appointed by Dr. A. B. Graham, president of the Indiana State Medical Association, to fill the place vacant by the absence of Dr. Emerson, who is in the Orient. Dr. Emerson's term expires January 1, 1932.

Newspaper release for October 31, "Your School Child's Health," read and approved.

Radio releases:

Saturday, Oct. 17—"Avoid a Health Depression."
Saturday, Oct. 24—"Question of Scarlet Fever Immunization."

Request received from Marion County Tuberculosis Society for use of radio on the Saturdays of November 28, December 5, December 12 and December 19 for tuberculosis talks in regard to the seal sale. The Bureau of Publicity expressed itself as being pleased to allot its radio period upon these days to the Marion County Tuberculosis Society provided these talks are submitted to the Bureau for review several weeks before the broadcast.

Request for speaker:

Oct. 27—Porter County Medical Society, Valparaiso, Ind. Speaker assigned.

Report on medical meeting:

Oct. 16—Adams County Medical Society, Decatur, Ind. "Common Skin Diseases."

Report made that the Executive Committee received the letter from the chairman of the 1931 Scientific Program Committee containing recommendations for the 1932 scientific program. (This letter had been referred to the Executive Committee by the Publicity Bureau.) The Executive Committee at its last meeting recommended that a committee be appointed to consider this letter and to review data gained from secretaries of state societies in regard to annual state programs. This committee has not yet been named by the chairman of the Executive Committee whose duty it is to select these men. The report of this committee is to be made to the midwinter meeting of the Council.

Editorial appearing in the *Indianapolis News* on medical service highly complimented. This same editorial was brought to the attention of the Executive Committee of the State Association which recommended that the Publicity Bureau write a suitable letter to the *News* expressing appreciation for this editorial.

Report on National Institute of Health pamphlets made by member of Bureau to whom the matter was referred. It was the opinion of the Bureau that this report would be suitable for a publicity release.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 29, 1931.

October 29, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; E. D. Clark, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held October 21 read and approved.

Newspaper release for November 7, "Scarlet Fever Immunization," read and approved.

Radio release, Saturday, October 31, "Ventilation."

Request for speaker:

Middle of January—Tuberculosis Society of Carroll County, Delphi or Flora, Ind. Mrs. James P. Wason, Delphi, president, asks for a speaker on "Tuberculosis from an Economic Standpoint".

Letter complaining against certain points in one of the syndicated articles of Dr. Brady, brought to the attention of the Bureau. A member of the Bureau was to make a report concerning this matter at the next meeting.

At the meeting on October 13 the Bureau addressed a letter to the director general of the American College of Surgeons in regard to the newspaper report as carried by the Associated Press concerning the address by the incoming president of the American College of Surgeons at the annual meeting of that organization. The following letter was received in answer to this statement by the Bureau:

> "We appreciate the clipping which you have sent regarding the addresses by Dr. Miller and Dr. Kanavel. We regret that the heading gives a wrong impression of the contents of the papers. I am sure there was no criticism from a medical standpoint, as the papers were read. These will appear in 'Surgery, Gynecology and Obstetrics" some time after the first of the year."

The members of the Bureau were requested to review a letter that the Bureau is preparing to send to various manufacturers in continuance of its work to gather information concerning rebates and credit memoranda. Further discussion of this letter was to come up at the next meeting of the Bureau.

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 3, 1931.

November 3, 1931.

Meeting called to order at 4:00 p. m.

President: Wm. N. Wishard, M.D., chairman; E. D. Clark, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held October 29 read, corrected and approved.

Newspaper release for publication November 14, "National Institute of Health," read and approved.

Dental release read and approved for publication November 21. No title upon release.

Report on medical meeting:

Oct. 16—Adams County Medical Society, Decatur, Ind. "Common Skin Diseases."

Request for speaker:

November 23, 24 or 25—Tri-County Medical Society, Seymour, Ind. Request that Albert Stump, attorney of the State Association, make a talk. Mr. Stump submitted one of the above three as a possible date. Definite date to be set later.

Letter received criticising certain syndicated articles written by Dr. William Brady that appeared in the *Indianapolis News*. The articles in question were upon the treatment of hernia. As this is a national syndicate the secretary was instructed to forward the letter, comments and correspondence to the secretary of the American Medical Association, and then take the matter up with the *Indianapolis News*.

The Bureau approved the following letter which is to be sent to various surgical houses and optical firms in Indiana:

"We wish to call your attention to the report of the Bureau of Publicity of the Indiana State Medical Association contained in the September number of THE JOURNAL of the Indiana State Medical Association which you will find on pages 507 and 508 in which report reference is made to the action of the Bureau of Publicity in regard to any form of rebates, credit memoranda or other form of division of fees.

"We also call your attention to the unanimous approval of the House of Delegates of the Indiana State Medical Association of the action and report of the Bureau of Publicity which you will find in the October number of THE JOURNAL of the Indiana State Medical Association on page 579.

"Having received the unqualified endorsement of the Indiana State Medical Association for the work of the Bureau of Publicity in this matter, the Bureau announces its readiness to give hereafter such publicity to any form of fee splitting whatsoever as in the judgment of the Bureau may be justified in any individual case.

"We beg to call your attention to the attitude of the American Medical Association on this matter which organization declares that 'it is detrimental to the public good and degrading to the profession, and therefore unprofessional, to give or to receive a commission.'

"We also call your attention to the rule of the American College of Surgeons which states that 'to accept rebates on glasses and other surgical apparatus and supplies is considered unethical and not consistent with Fellowship in the College.'

"In addition, we call your attention to the constitution and by-laws of the Indiana State Medical Association which declare 'this association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.'

"The Bureau will be glad to receive any authentic information from you as to any other business house which is indulging in any form of rebate or credit memoranda in favor of physicians sending patients to them for fitting glasses, trusses or any sort of merchandise. We will also be glad to have your early response indicating the present practice of your firm and an assurance of cooperation with the Bureau in breaking up this pernicious practice. Presents to or special discounts on purchases of supplies by physicians is another form of this practice.

"The Bureau desires in no way to suggest a line of action or to interfere with the conduct of the business of any commercial house. However, the Bureau reserves the right to give publicity to business methods which are in violation of the constitution and by-laws of our national, state and county organizations. The Bureau's immediate purpose is to obtain a definite statement from all commercial houses dealing with the medical profession as to their attitude on this matter. We will greatly appreciate your reply giving approval and hope you will not be listed in the group we compile of those who have failed to reply.

"The medical profession owes support to those houses which conduct a high class, ethical business, but owes

nothing to those who encourage division of profits with those who already have received pay for legitimate professional service. With the discontinuance of rebates it should be possible to lower the present high price of glasses and surgical supplies.

"This communication is being sent by the Bureau to medical and surgical supply houses, opticians and optical firms in Indiana. Those who have heretofore received communications will kindly understand that the Bureau is asking them for any information they have obtained since our last correspondence and a statement as to their present views on the matter."

A list of the firms to which this letter is to be sent was to be available for the Bureau at its next meeting.

Material in regard to an alleged fake treatment for asthma submitted to the Bureau. This was to be forwarded to the Bureau of Investigation of the American Medical Association.

The following letter was received from a physician in a northern county in regard to proposed educational and publicity campaign:

"Thank you very much for your kindness in forwarding to us your suggestions relative to our plan for instituting an Educational and Publicity Campaign in this district.

"Some time ago I secured from the Director of Publicity of the American Medical Association a large variety of topics and talks which I am sure will be of value to us. Because of this, I believe Dr. Dodson has not replied to the copy of my letter which you forwarded him.

"From the Academy of Medicine at Toledo, we have received a very valuable outline of the manner in which they conducted their radio talks, and other educational measures.

"The progress of our campaign has been somewhat delayed, but we fully intend to cooperate, in every way possible, with all organized lay organizations and along this line have secured from the Chamber of Commerce in each of the principal cities of this district a list of all civic organizations. It is our plan to supply speakers to these organizations on any and all occasions possible.

"I would be very glad to receive the paper you mentioned, which outlines the local publicity campaign, speakers' training bureau, etc., if you can secure this from the American Medical Association.

"I believe that we will be able to secure the co-operation of the local newspapers in running a weekly item under the auspices of the county medical society, in addition to their regular syndicated health news.

"It seems that we are having some difficulty in getting the co-operation of our members to give the various talks we have in mind, but with a suitable nucleus I hope to secure the services of a trained public speaker who will take this group and advise them on the proper methods of effective speaking."

The following letter was received from the feature editor of one of the press services of Cleveland, Ohio:

"We are looking for features for the general feature service of the Associated Press. Experiments, tests, research and achievements of a medical and scientific nature often are of popular interest.

"Such stories often are illustrated, though not always.

"We would appreciate your watching out for stories of this kind for us. If you have a regular release, we would be glad to be placed on the mailing list."

The following bills were approved for payment:

Central Press Clipping Service	$ 5.00
The Bailey Office Supply	15.00
A. B. Dick Company	6.00
	$26.00

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 11, 1931.

November 17, 1931.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. H. Stygall, M.D., E. D. Clark, M.D., and Thos. A. Hendricks, executive secretary.

Minutes of the meeting held November 3rd read and approved.

Newspaper release for publication November 21st—dental release—"Habits That Build Good Teeth," read and approved.

Radio release, Saturday, November 14th—"Deafness".

Request for speaker:

November 25—Tri-County Medical Society, Seymour. Request that Albert Stump, attorney for the Association, make a talk. Mr. Stump accepts.

Report on medical meeting:

October 27—Porter County Medical Society, Valparaiso: "Some Simple but Important Measures in the Management of Common Digestive Disorders".

Letters received from the American Medical Association in regard to newspaper articles written by Dr. William Brady.

A list of more than one hundred optical and surgical houses throughout the state compiled for the Bureau. The letter which was approved by the Bureau at its meeting November 3rd is to be sent to this list of optical and surgical houses and the Indianapolis firms which some time ago received other letters upon this subject from the Bureau.

Letter received from physician in regard to the therapeutic claims of a product called Electrovita. Letter forwarded to the Bureau of Investigation of the American Medical Association.

Letters from the executive secretary of the Interstate Postgraduate Medical Association of North America reviewed by the Bureau.

The following bill was approved for payment:

W. K. Stewart Co.	$ .75

There being no further business the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 24, 1931.

MEMORIAL TO DR. GEORGE F. BEASLEY

(Prepared upon Authority of the House of Delegates)

Dr. George F. Beasley, pioneer surgeon and one of the few surviving commissioned officers of the Civil War, died at his home in Lafayette, Indiana, on March 10th, 1931, after a long illness, at the age of eighty-nine years.

The news of his passing was received with sorrow throughout the community in which he had ministered to the sick and injured for a period of more than sixty-five years.

Dr. Beasley, in his ninetieth year, continued to practice in a limited way, until he was stricken with paralysis early in 1930. Although confined to his bed, he retained his mental faculties until a short time before his death.

Born at Sugar Grove, Montgomery County, Indiana, November 14th, 1841, he was the son of the Rev. Allen and Milly (Pruitt) Beasley. The father was a Methodist minister and the family was among the earliest settlers of that community. His father was killed while serving as chaplain in the Civil War and his grandfather served as chaplain in the Revolutionary War.

In 1860 he entered Rush Medical College in Chicago, where he received his M.D. degree in 1863. He volunteered his services to the Union Army and served in the Mississippi squadron, on the steamship Fairy and Black Hawk, where he won distinction as an army surgeon. He rose to the rank of major and later, in the last days of the rebellion, was sent to Philadelphia for recruiting service.

After the war Dr. Beasley went to Bellevue Hospital, New York City, from which institution he also received a

degree. He then located in Lafayette, Indiana, where he practiced continuously as a physician and surgeon from 1865 until his death.

On January 29th, 1884, he was married to Miss Mary Virginia Sheetz, who still lives at the family home.

He was one of the first surgeons for the Monon railway, serving in that capacity before the completion of the railway. He was later surgeon for all the railroads entering Lafayette.

He served as president of the National Association of Railway Surgeons, president of the Indiana State Medical Society (1892-1893) and as president and secretary of the Tippecanoe County Medical Society. He was one of the organizers of the local Grand Army post more than fifty years ago, and was the last surviving member of the local post of the Loyal Legion, made up of Civil War officers. He was a member and trustee of Trinity Methodist church and a member of the Knights of Pythias Lodge. He also served on the Lafayette city council.

(Signed) G. K. THROCKMORTON, M.D.,
J. W. SHAFER, M.D.,
Memorial Committee.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

ANNUAL REPORT FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1931

The purpose of the Division is to secure a report of every case of communicable diseases that occur during the year and to keep a record of all reports; and to carry on an educational work for the prevention and control of such diseases.

Every health officer in the state is required by a ruling of the Indiana State Board of Health to make a report of all communicable diseases in his jurisdiction each week and if no diseases occur, send a negative report stating this fact. It is required by a statutory law that every practicing physician in the state report cases of tuberculosis that come under his care. Also, any hospital, dispensary, asylum or other similar private or public institutions report their cases of tuberculosis. To facilitate this reporting, the United States Public Health Service furnishes a special franked post card distributed by health officers having jurisdiction to the physicians and institutions to report direct to the Indiana State Board of Health. It is also required that every practicing physician in the state report their cases of syphilis, gonorrhea or chancroid. These reports are made on blanks furnished by the Indiana State Board of Health and are held confidential and shall not be inspected by any person other than the official custodian of such reports in the Indiana State Board of Health, or by court order. No health department, state or local, can effectively prevent or control diseases without the knowledge of when, where and under what conditions cases are occurring.

The name and number of communicable diseases as indicated by the reports of the health officers and physicians of the state are shown below from the urban and rural population (urban includes cities 2,500 and over, rural all under 2,500 population):

DISEASES	TOTAL	URBAN	RURAL
Tuberculosis	3,127	1,875	1,252
Chickenpox	3,991	3,251	740
Measles	18,377	13,255	5,122
Scarlet fever	8,994	4,427	4,567
Smallpox	3,503	2,158	1,345
Typhoid fever	355	143	212
Whooping cough	2,445	2,023	422
Diphtheria	1,655	1,029	626
Influenza	1,221	225	996
Pneumonia	281	75	206
Mumps	685	606	79
Poliomyelitis	121	69	52
Meningococcus meningitis	291	198	93
Trachoma	12	3	9
Undulant fever	14	9	5
Malaria	2	1	1
Tularemia	14	2	12
Pellagra	1	0	1
Ophthalmia neonatorum	2	1	1
Septic sore throat	30	4	26
Hydrophobia	1	0	1
Encephalitis lethargica	19	0	19
Leprosy	2	1	1
Glanders	1	0	1
Hookworm	1	1	0
Tetanus	2	2	0
Grand total	45,147	29,358	15,789

29,993 cases of diseases were reported last year. Marked increases are noted in the principal communicable diseases over the previous year, except smallpox and meningococcus meningitis.

Smallpox. The incidence of smallpox shows a tendency to decline as compared with a number of years passed. The decline over the previous year is quite noticeable, when 6,131 cases were reported. However, a case estimate over a seven-year period is 3,958 cases.

Meningococcus Meningitis. This disease has declined forty percent over the previous year. There were 476 cases last year which was the greatest number of cases reported in any single year of record in the Division. The greatest number of cases in different health units were: Indianapolis, 85; Gary, 29; East Chicago, 10, and Tell City, 9 cases, respectively.

Measles. The incidence of measles shows the greatest gain. There were only 3,158 cases the preceding year. It is claimed that measles goes in cycles of five years' duration. The period began at the close of 1926 when 26,255 cases were reported. The average for the five-year intervening period is 6,485 cases. The period between 1926 and 1921, 9,949 cases were reported. This would indicate that there is some truth in the assertion that the disease travels in five-year cycles.

Scarlet Fever. There was a sixty-seven percent increase of scarlet fever over the previous year. The number of cases (8,994) this year is the greatest number of cases ever reported in any single year of record in the Division. There were eighty-five cases reported to one death during the year.

Diphtheria. The incidence of the prevalence of diphtheria shows a marked increase over the previous year, when 1,167 cases were reported. The increase of the disease is noted in other states, especially the southwestern states. The case estimated expectancy for the last five years is 1,825 cases, which shows that the disease is gradually declining.

Typhoid Fever. In comparison with the previous year, typhoid fever made a fifteen percent increase—302 cases were reported. The estimated expectancy was 610 cases. The estimated expectancy is based on the experience of the last seven years. The reports will show that there were eighty-nine deaths from the disease during the year.

Tuberculosis. This report shows that there is a substantial increase in the number of tuberculosis cases reported. There were 2,506 cases reported the previous year. The reports will show that there were 1,893 deaths in the fiscal year and that there were 1,234 more cases reported than deaths. An effort has been made to secure at least two cases to one death reported. It is a well-known fact among health statisticians that tuberculosis along with other dangerous communicable diseases are not well reported to health authorities.

Poliomyelitis. The incidence of the prevalence of poliomyelitis shows about a thirty percent increase over the previous year. Eighty-seven cases were reported. The disease has been epidemic in the New England and Middle Atlantic states especially Massachusetts, Connecticut, New York and New Jersey. Also, been prevalent in Michigan and Minnesota, but the disease is on the decline. The greatest prevalence is shown in late summer and autumn.

Whooping cough shows a thirty-eight percent gain over the previous year. A very small percentage of cases that occur are reported and no medical service rendered. There are more deaths from whooping cough than scarlet fever and typhoid fever.

Influenza. The incidence of influenza shows that the number of cases (1,221) reported during the year is only ten percent more than the number of deaths. The reporting of influenza cases is regarded in a similar manner as pneumonia and septic sore throat. There were 281 cases of pneumonia with 2,865 deaths, and septic sore throat thirty cases with one hundred forty-one deaths. These diseases are some of the more serious. Practicing physicians report deaths and name the disease and the cause of death. Why not report the cases of sickness beforehand? It is a very simple procedure.

H. W. McKANE, A.B., M.D., Director,
LEO J. RAIL, State Investigator,
EUNICE M. JACOBSON, Stenographer,
HELEN E. ELDER, Stenographer.

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, NOVEMBER, 1931

Morbidity reports from the health officers, physicians, hospitals and state institutions show 1,844 cases of diseases from seventy-eight counties during the current month; 1,363 cases of diseases reported the previous month from eighty counties. The corresponding month the preceding year 2,895 cases were reported. Eighty-eight counties sent in four hundred thirty-eight negative report cards. Four counties, namely, Decatur, Newton, Pulaski and Wabash, did not report, either negative or positive.

A summary of current prevalence of diseases from the urban and rural population is shown below:

DISEASES	TOTAL	URBAN	RURAL
Tuberculosis	222	141	81
Chickenpox	408	333	75
Measles	138	102	36
Scarlet fever	415	198	217
Smallpox	31	6	25
Typhoid fever	27	17	10
Whooping cough	137	95	42
Diphtheria	361	209	152
Influenza	21	0	21
Pneumonia	6	1	5
Mumps	63	61	2
Poliomyelitis	3	1	2
Meningococcus meningitis	3	2	1
Trachoma	1	1	0
Undulant fever	4	3	1
Malaria	3	0	3
Tularemia	1	0	1
Grand total	1,844	1,170	674

There is an increase of all the principal communicable diseases except typhoid fever and smallpox.

Typhoid Fever. The reported incidence of typhoid fever was thirty-eight percent decrease over last month's figures. The disease is approaching a low level for the year. The fewest cases are usually during January and February. The case estimate for November during the last five-year period is thirty-two cases.

Smallpox has been stationary for the last three months with thirty-one cases reported each month; 233 cases were reported in November of last year. This is the lowest level reached by smallpox for the last ten years. The estimated expectancy for November is 271 cases. The estimated expectancy is based on the experience of the last seven years including epidemics.

Diphtheria. The number of cases of diphtheria (361) reported for the current month is twenty-five percent increase over the previous month, and thirty-one percent increase over the corresponding month the preceding year. A number of states have shared this increase, especially the south central group of states. The case estimate for the seven-year period is 306 cases.

Scarlet Fever. The reported incidence of scarlet fever is not far off the normal trend for November. However, there was a thirty percent increase over the previous month; 293 cases were reported last month; 829 cases the corresponding month the preceding year. The estimated expectancy was 512 cases.

Measles. The incidence of this disease shows a low level at this season of the year. The number of cases reported the current month (138) is forty-five percent increase over the previous month, and sixty percent decrease over the corresponding month the preceding year. Measles time is in the early spring months.

Poliomyelitis and Meningococcus Meningitis. There is quite a lull in the reported incidence of these two diseases this month—three cases each were reported. The prevalence peak for the two diseases is shown in late summer and early autumn months except the epidemic of meningococcus meningitis in 1929 and 1930, which occurred in the winter months.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

INDIANA VENEREAL DISEASE CLINICS

Number of cases never previously admitted	394
Total number of old cases and readmissions under treatment during month	6,057
Number of cases discharged as arrested or cured during month	169
Number of cases discontinued treatment without permission	200
Total number of cases remaining under treatment during month	6,082
Number of male syphilitic cases remaining under treatment during month	2,683
Number of female syphilitic cases remaining under treatment during month	1,892
Total number of syphilitic cases remaining under treatment during month	4,575
Total number of treatments during month	13,318
Total number of visits to clinic for treatment, examination or advice	13,621

STATISTICAL REPORT

Total number of cases reported by physicians, hospitals, clinics, etc.:

Syphilis	283
Gonorrhea	193
Chancroid	6

During the month eight hundred fifty-eight pamphlets were distributed. Eight hundred thirty-nine were mailed upon receipt of twenty-four requests and nineteen were sent to two people on our own initiative.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met in the Public Library, October 27, 1931, with Dr. Marcus Lyon, president, in the chair.

Dr. George Geisler, chairman of the Public Relations Committee of the Society, reported on the Central Service Bureau, giving the number of doctors who had responded to his questionnaire, expressing their willingness to be on twenty-four hour call to take care of the indigent sick. Dr. Geisler, appointed on the governor's committee, also reported on the meeting of that committee, which met in Indianapolis the previous week to consider how best and in what manner the indigent sick of the entire state could be taken care of. The society decided that the Public Relations Committee, the president of the society, and two other members appointed by the president, should meet with the township trustees and report at the next meeting.

Dr. Carl R. Bassler's application for membership in

the St. Joseph County Medical Society was submitted to the Board of Censors.

The paper of the evening, "The Status Quo of the Medical Profession," was given by Dr. J. C. Boone. It was discussed by Drs. Douglass Owen, Geisler, Thompson, Allen, Bosenbury, and Knapp of South Bend, and Dr. Wygant, of Mishawaka.

The St. Joseph County Medical Society held its regular meeting Tuesday, November 3, 1931, in the Public Library, with President Lyon in the chair.

The speakers of the evening were: Dr. R. E. Moreland on "Cancer of the Skin," and Dr. Louis A. Sandoz on "Ringworm Infection of the Hands and Feet."

Dr. Moreland said:

"The best classification is that based upon the type of cells from which the carcinoma develops, of which there are two general types, the squamous, or prickle-cell type, also called the epidermoid type, and the basal-cell variety."

The earliest lesions, as well as the advanced stages, were described, including those of the mucous membranes, and the differential diagnosis given.

"The best treatment of carcinoma is prophylaxis, and as Warthin points out the logical method of attack upon cancer at the present time should be an attempt to remove and prevent and to cure all forms of chronic irritation, particularly when they occur in individuals belonging to families in which there is known multiple incidence of cancer in one or more generations.

"The treatment of squamous-celled carcinoma of the skin consists in the removal or destruction of the growths of various means. This can best be accomplished by excision, endothermy, the actual cautery or x-rays or radium. When complete removal can be accomplished by surgery or the actual cautery, this is usually the safest method. However, on account of the location of the lesion, cosmetic results desired, etc., x-ray or radium may be found preferable. Each lesion, however, has its own index of radiosensitivity—for this reason some carcinomas respond well to x-ray or radium radiation while others do not—this very thing rendering this method less applicable, generally, than removal by surgery or by the cautery. The actual electric cautery is a very excellent method, as the heat penetrates the tissue around the line of separation, destroying outlying cells and sealing off the lymphatics as well as leaving the wound sterile. There is also little if any bleeding. The advantage of the knife is quicker healing and less scar formation. The possibility of leaving carcinoma cells in the line of incision must be borne in mind. Endothermy, or the radio-knife, has many advocates at the present time and is a very satisfactory method. Healing is usually by first intention and scarring is minimal and there is little bleeding. Many still prefer the cautery, however, because of the heat penetration factor. Following destruction or removal of the tumor mass, deep radiation is frequently considered of benefit in destroying any malignant cells that might have been missed and left behind. The question of the value of preoperative radiation is still one of opinion, but in general, I believe it is good practice, provided that the operative removal is not delayed. When glandular development has occurred, surgical removal is indicated and subsequent irradiation advisable."

A description of the clinical types of basal-cell carcinomas is given and their differentiation from squamous-cell lesions.

Regarding the treatment, "the lesions generally respond favorably and promptly to treatment. Surgical diathermy is a very satisfactory method. Currettage and the application of caustics has been abandoned largely, although any method which completely destroys or removes the lesion will effect a cure, and this should be done at the earliest possible time.

"Radium therapy gives excellent results with a minimum of scarring. Small lesions can be destroyed by radium with such perfect cosmetic results that it is impossible to detect the former site of the lesion. Comparable results may be obtained by roentgen therapy, but the versatility and generally greater filtration of radium makes it the preferred of the two agents.

"Recurrences after unsuccessful or incomplete treatment are best handled by the actual cautery or surgical diathermy sometimes combined with interstitial radiation. The radio-sensitiveness of cancer decreases with successive irradiations. Care must be taken in using radium or x-rays on growths very near cartilage or bone as necrosis or sloughing may develop and healing prolonged.

"Prophylaxis is the important consideration in the treatment of melanoma. This is accomplished most effectively by wide surgical excision or thorough electrocoagulation of all pigmented moles which are subject to friction, pressure, or other forms of irritation, preference being for the former method, except where it entails unsightly scarring.

"After malignancy has developed treatment is generally ineffective, often apparently hastening dissemination. However, cures sometimes are obtained and for this reason therapeutic measures should generally be undertaken. Massive doses of x-ray or radium are probably preferable to surgery and should be directed over primary and metastatic lesions. Nevertheless, results are generally disappointing, the disease usually spreading rapidly and causing death. Recurrences may, however, not manifest themselves for as many as ten years after apparent cure."

Dr. Sandoz's abstract is as follows:

"Fungus infection is rapidly becoming the most common disease of the skin and at least fifty percent of all adults show evidence of, at some time or other, ringworm of the hands or feet."

The differential diagnosis, especially in regard to eczema and to palmer and planter syphilides, was considered.

In all suspicious or "borderline" cases a search for the fungus in potassium hydroxide preparation should be made.

The various types of ringworm lesions in regard to their clinical appearance was outlined and described, as were the so-called trichophytids, microsponds and epidermophytids.

Prophylaxis in regard to fungus infection, an often neglected phase of the actual treatment, was stressed and work done with sodium hyperchlorite, sodium thiosulphate and fumigation with the formaldehyde candle was discussed.

As yet, there is no remedy that promises ideal results—that the many various methods of treatment, although highly effective with some observers, are complete failures in the hands of others—a fact probably due to the virulency of the species of organism that is etiologic and the susceptibility of the individual.

Ringworm of the nails was considered, described and differential diagnosis gone into, as well as the treatment.

By proper and persistent treatment, ringworm of the hands and feet is curable. Periodic fumigation with the formaldehyde candle of the locker rooms of school and college gymnasiums, golf clubs, etc., would, no doubt, greatly reduce the incidence of ringworm infection of the hands and feet.

Discussion of both papers was by Drs. Skillern, Allen, and Sandock.

The business of the meeting was taken up last. The applications of Drs. C. J. Langenbaln and H. D. Tripp for membership in the society were referred to the Board of Censors.

The president announced that the Public Relations Committee, with the two other members, Drs. Sensenich and Dugdale, and himself had met with the township trustees the previous day and called on Dr. Geisler for a report. Dr. Geisler gave a resume of why the governor appointed a committee, the members of the committee, and what that committee hoped to accomplish, which is summed up in the following:

On October 20, 1931, the Honorable Harry G. Leslie, Governor of Indiana, named a committee of six physicians of the state, which is a part of the Governor's Relief

Commission, with a view of standardizing the charges for medical aid to the poor, and bringing about a better business relation between physicians and township trustees. Governor Leslie also suggested that a committee from each county medical society confer with the township trustees of their county to bring about a full understanding as to medical charges for services rendered to those in distress. The Medical Service Committee of the Governor's Relief Commission held its first meeting October 22, 1931, at Indianapolis.

Medical Service Committee of the Governor's Relief Commission: Dr. W. H. Kennedy, chairman, Indianapolis; Dr. O. O. Alexander, Terre Haute; Dr. F. S. Crockett, Lafayette; Dr. E. M. Shanklin, Hammond; Dr. G. D. Scott, Sullivan; Dr. G. J. Geisler, South Bend.

Dr. J. H. Hewitt, Indianapolis, secretary of the Governor's Relief Commission, attended this meeting and pointed out the reasons for the formation of this committee. They were as follows:

(a) To make a survey of the relationship between township trustee and the medical profession in carrying on poor relief work.

(b) To work out a plan of equalization and stabilization of medical fees in sick poor relief work.

At this meeting, the state laws governing the medical care of poor relief work and responsibilities of the county commissioners and township trustees were reviewed and found clear and concise.

The committee went on record that the principles upon which medical services for the indigent poor were based are as follows:

1. That the medical profession is not bound by ethics in any way to defend any doctor or condone any physician in wrong doing.

2. That the care of the indigent sick is a community responsibility and not a private charity of the medical profession.

3. That the medical profession of Indiana each year has given millions of dollars' worth of medical care free of charge to the indigent sick of this state.

4. From the facts at hand, the committee believes that the most equitable way to take care of the indigent sick is for the township trustee or the party responsible for the poor relief work of the county to draw up a contract with the physicians of that county as a group rather than with an individual physician.

In order to ascertain what is going on in every county and every township of the state in regard to poor relief work, the committee decided to send out a questionnaire to every township trustee.

Dr. Sensenich followed with a detailed account of what other counties and townships had done and were doing, and suggested certain changes and safeguards.

The Public Relations Committee wished a definite program outlined by the society before going again before the township trustees, and voted to hold an adjourned meeting Thursday, November 5th, in the Public Library, for further discussion.

The St. Joseph County Medical Society held a special business meeting, November 5th, in the Public Library, as a continuation of the meeting of November 3, 1931, with the president, Dr. Lyon, in the chair.

Drs. Geisler and Sensenich reviewed briefly what had been reported the previous meeting. Dr. Fisher made the following motion, which was seconded:

"It is hereby moved that the St. Joseph County Medical Society approve the action of the Governor's Relief Commission in concluding:

" 'That the most equitable way to take care of the indigent sick is for the township trustee or the party responsible for the poor relief work of the county to draw up a contract with the physicians of that county as a group rather than with an individual physician. This contract should give specified fees for medical services which may differ somewhat from county to county, but will tend to become standardized as the system is put into practice throughout the state. By drawing up these contracts with the physicians of a township as a unit *the inherent principles that an individual has a right to select his own physician is thereby maintained and merely because he happens to be poor this fact does not force an individual to receive the medical attention of any one specified physician rather than the physician of his own choice,'* and hereby authorizes the Public Relations Committee to continue negotiations with the proper authorities looking to the establishment of such a contract, as authorized by the Society in regular session on October 27, 1931."

The discussion of the above motion was limited to three minutes for each person, so there would be time for everyone to discuss it. Those taking part in the discussion were Drs. Hyde, Condit, Sandock, Green, Harmon, Berteling, Allen, Birmingham, Sullivan, Douglas Owen, Eastman, Hoffman, and Geisler of South Bend, and Drs. Christopher and Miller of Mishawaka. The motion was carried unanimously.

A second motion was made by Dr. Huffman, and seconded. It was as follows:

"It is hereby moved that in the negotiation of the contract with the local authorities the fee schedule shall be approximately one-half (½) of the minimum fee."

The motion was lost and the matter of fees was left to the discretion of the committee.

The regular meeting of the St. Joseph County Medical Society convened in the Public Library, November 10, 1931, Dr. Marcus Lyon, president, presiding.

Dr. Geisler, chairman of the Public Relations Committee, reported that Mrs. Walker had been appointed as head of the Central Service Bureau to take the place of Miss Waldo, resigned.

The paper of the evening was presented by Dr. David A. Bickel, on "Trichomonas Vaginitis", with lantern slide illustrations. Dr. Bickel's resume follows:

The protozoan Trichomonas Vaginalis was found on routine examination in the vaginal secretions of 10.8 percent of 157 pregnant and nonpregnant women; 38 of these complained of leucorrhea. In the 17 cases in which the organisms were found, other conditions were present in 9 to account for the leucorrhea. The characteristic symptom of the disease is a profuse, irritating, yellowish green discharge which may contain small bubbles. The vaginal mucus membrane is inflamed and bleeds easily. Due to their motility the organisms are easily seen in the hanging drop preparation. The literature on the treatment of this infection was reviewed and it was found that almost every antiseptic has been recommended. Twenty-six cases were treated by various methods for periods lasting from two weeks to four months. Only 25 percent of these patients were cured. The finding of trichomonas is important because a number of these patients had had operations on the cervix, had the cervix cauterized, or been told they had gonorrhea. Summary—Trichomonas Vaginalis is frequently found, in 10.8 percent of our cases. Although the number of cases reported here is too small from which to draw any definite conclusions, it is our opinion, as well as that of other observers, that the parasite is frequently a harmless inhabitant of the vagina, at times is pathogenic and capable of producing a characteristic form of vaginitis. There is no satisfactory curative treatment.

The paper was discussed by Drs. Pauzek, Condit, Sullivan, Sandock, Douglas Owen and Marcus Lyon.

The committee for the annual meeting gave the following program:

St. Joseph Hospital, 10:00 a. m. to 12:00. Clinical cases.

Oliver Hotel—Afternoon session, 2:00 p. m.

Joseph A. Johnston, M.D., Pediatrician-in-Chief, Henry Ford Hospital, Detroit, "Infant Feeding".

Norman F. Miller, M.D., Professor of Obstetrics and

Gynecology, University of Michigan, Ann Arbor—"Bleeding During Third Trimester of Pregnancy".

Raphael Isaacs, M.D., Associate Director, Simpson Memorial Institute for Medical Research, University of Michigan, Ann Arbor—"Diagnosis and Treatment of Anemia".

Kellogg Speed, M.D., Associate Professor, Clinical Surgery, Rush Medical College, Chicago—"Unhappy Results in Treatment of Fractures".

Oliver Hotel—Dinner 6:30 p. m.

Evening session 8:00 p. m.

James B. Herrick, M.D., Professor of Medicine, Rush Medical College, Chicago—"Recurrent Malignant Growths as Seen by the Internist".

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

The mid-year meeting of the Board of Directors of the Woman's Auxiliary to the American Medical Association was held November 13th, 1931, in the Pearson Hotel, Chicago, with twenty-three members representing fourteen states in attendance, the president, Mrs. Arthur B. McGlothlan, Missouri, presiding.

Mrs. McGlothlan stressed parts of the Constitution concerning the objects of the Auxiliary, as follows: "Through its members, to extend the aims of the medical profession to all organizations which look to the advancement of health and education; and to do such work as may be approved from time to time by the American Medical Association. She mentioned many things accomplished, particularly "The President's Hand Book" and a trip into the West, effecting an organization in Washington; she spoke of constructive work going on, referring to the educational programs developing in several states. She said that the most complete educational program for Auxiliaries she had seen was recently published in the INDIANA STATE MEDICAL JOURNAL, outlined by the editor.

The treasurer, Mrs. G. Henry Mundt, Illinois, reported that the Pennsylvania Auxiliary already has paid almost $500 in dues, again making Pennsylvania the banner state in membership, with two thousand enrolled.

Mrs. J. Newton Hunsberger, Pennsylvania, in charge of treasurer's receipt books, requests state treasurers to send in a list of former members, with the *whys* for delinquency in dues. It is desired to have a national "In Memoriam" book.

The chairman of organization, Mrs. James Blake, Minnesota, read encouraging reports from many states, and received support for her plans in North Dakota. "The Auxiliary thrives where it receives encouragement from the physicians themselves."

The study envelopes prepared by the Program Committee, Mrs. George H. Hoxie, chairman, were discussed. In several states these lessons are used by various organizations.

In keeping with the request made by the House of Delegates of the A. M. A. that the Woman's Auxiliary make the dissemination of *Hygeia* one of its chief activities, great attention is given to this work. In the ten months of 1931 there are 504 more subscriptions than in the twelve months of 1930. A *Hygeia* book was exhibited, containing maps of all states with number of subscriptions listed in each county. One county in Missouri sends a subscription to every school (142). It was suggested that Auxiliaries pay for an advertisement of *Hygeia* in at least three issues of the paper of their federated clubs.

The responses of state presidents showed in Minnesota close cooperation existing between the Auxiliary and various women's organizations; in Illinois, a study of medical ethics, a survey of magazines giving medical reviews (many unjust), and a list of books, principally fiction, written by physicians or about physicians; in Arkansas, study envelopes sent over the state, a circulating *Hygeia* library for rural schools with bundles of used copies of the magazine, and the broadcasting of health talks; in West Virginia, activity along the line of self-education; in Indiana, an awakening of physicians' wives to the possibilities of service through club contacts; in Ohio, pioneer work; in Iowa, a study of legislation; in Michigan, the preaching of the "exclusiveness" of the Auxiliary; in Kentucky, a quarterly Auxiliary supplement to the *State Journal* beginning January first, and the raising of one thousand dollars to contribute to a fitting memorial for Mrs. Jane Todd Crawford, heroine-pioneer who submitted to the surgical removal of an ovarian tumor by Dr. Ephraim McDowell of Kentucky. Mrs. Crawford is buried in Sullivan county, Indiana; in Wisconsin, self-education; Wisconsin was represented by three women, one of whom was the Auxiliary secretary who, it was learned, is the assistant to the Executive Secretary of the State Medical Association and is paid to take charge of Auxiliary activities. Mrs. James Blake, Minnesota, announced the same arrangement in her state, and Mrs. Freeman, Illinois, stated that the educational committee of the Illinois State Medical Association furnishes similar privileges. Of course the Auxiliary thrives in these favored states.

A vote of thanks was extended to Dr. Olin West for the printing of the minutes and reports of the Ninth Annual meeting in Philadelphia, and a tribute to Mrs. McGlothlan for her untiring zeal.

The meeting adjourned at five-thirty o'clock.

Respectfully submitted,

MRS. F. W. CREGOR, Director.

CORRESPONDENCE

BARTHOLOMEW COUNTY MEDICAL SOCIETY COMMENDS COUNTY HOSPITAL

December 2, 1931.

To the Editor:

Herewith find a report of a recent action of the Bartholomew County Medical Society:

WHEREAS, There have been certain false and malicious statements made concerning the management of our Bartholomew County Hospital;

WHEREAS, An investigation was made to ascertain whether or not such accusation be true;

WHEREAS, After hearing all the evidence said accusers could produce, the trustees have returned a verdict that the accusation was entirely false.

NOW BE IT RESOLVED, That we, the Bartholomew County Medical Society, commend said trustees for their diligent efforts, and just decision, against a malicious effort to destroy the usefulness of the county's property in caring for suffering humanity;

AND BE IT FURTHER RESOLVED, That a copy of these resolutions be published in the local and Indianapolis papers. Also a copy be sent to the Board of Trustees and to Miss Hoffman, the superintendent; also that a copy be sent to THE JOURNAL of the Indiana State Medical Association.

J. K. HAWES, M.D., Secretary,
Bartholomew County Medical Society.

APPRECIATION OF MR. STUMP

Kokomo, Indiana, November 27, 1931.

To the Editor:

I wish to write a word of appreciation of the attorney for the Indiana State Medical Association, Mr. Albert Stump.

I have just experienced one of those disgusting ordeals which threaten every physician from time to time—a malpractice suit. I do not intend to belittle the work of my local attorneys, whose efforts were invaluable, but I do

want the members of our Association to realize the ability of Mr. Stump as a trial lawyer. We might have won without him, but it was an assured fact with him. He out-thought and out-generaled the opposing counsel in direct and cross examinations and his closing argument was a masterpiece of clearness and logic.

In my opinion no physician in this state needs to be fearful of a malpractice suit if he has right on his side, and as long as Mr. Stump continues his connection with our State Association. I do not believe that I could say more in praise of this man.

The money that I have paid into the Indiana State Medical Association for medical protection is the best investment I ever have made, and I shall pay my dues this December more cheerfully than ever before.

Sincerely yours,

Charles J. Adams, M.D.

BOOK REVIEWS

The Nurse's Medical Lexicon. By Thomas Lathrop Stedman, A.M., M.D., Editor of "Twentieth Century Practice of Medicine", the "Practical Medical Dictionary," etc. Flexible binding. 629 pages. Price $2.00. William Wood and Company, New York, 1931.

This dictionary is intended for the use of graduate and student nurses, premedical and dental students, and the general public. It is replete with words and definitions of medical terms and should be of great value to student and graduate nurses. The book also includes an appendix containing tables of weights and measures, temperature charts, poisons and antidotes, and tables of infectious diseases. The book should ably fill the use for which it is intended.

Practical Dietetics for Adults and Children in Health and Disease. By Sanford Blum, A.B., M.S., M.D., Head of the Department of Pediatrics, and Director of the Research Laboratories, San Francisco Polyclinic and Postgraduate School. Fourth revised and enlarged edition. 380 pages. Cloth. Price $4.00. F. A. Davis Company, Philadelphia, 1931.

This is the fourth edition of a practical book on dietetics by a well known authority. Revisions, alterations and additions have been made in this edition to increase the usefulness of the book. Included in this edition is a list of the chief sources of vitamins, a discussion of the subject of alkaline foods in the treatment of acidosis, and examples of alkaline ash foods and diets have been supplied. The book is divided into two parts, the first dealing with dietary for adults in health and disease, and the second part with dietary for infants and children in health and disease. The volume is simplified and clear and should be a great help to any physician in outlining dietary lists for patients in health and in disease.

Approved Laboratory Technique, Clinical, Pathological, Bacteriological, Serological, Biochemical, Histological. Prepared under the Auspices of The American Society of Clinical Pathologists by John A. Kolmer, M.D., Dr. P.H., D.Sc., LL.D., Professor of Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania; Professor of Immunology and Chemotherapy, School of Medicine, Temple University; Head of the Department of Pathology and Bacteriology, Research Institute of Cutaneous Medicine, and Fred Boerner, V.M.D., Associate Professor of Bacteriology, Graduate School of Medicine, University of Pennsylvania, Assisted by C. Zent Garber, A.B., M.D., Associate in Pathology, Peking Union Medical College; formerly Associate Pathologist Henry Ford Hospital, Detroit; and Committees of the American Society of Clinical Pathologists composed of Dr. J. H. Black, Dr. H. J. Corper, Dr. A. G. Foord, Dr. A. S. Giordano, Dr. F. W. Hartman, Dr. P. Hillkowitz, Dr. R. A. Keilty, Dr. R. A. Kilduffe, Dr. K. M. Lynch, Dr. A. H. Sanford and Dr. F. L. Sondern. 663 pages with 300 illustrations and 11 colored plates. Price $7.50, D. Appleton and Co., New York, 1931.

Seldom does the reviewer have such a pleasant duty to perform as this of commenting on such a valuable and complete work on clinical pathology. The American Society of Clinical Pathologists, realizing the importance of having standardized technique in all laboratories, so that reports from different laboratories may be comparable, appointed Dr. Kolmer to edit such a work. The finished work is the acme of perfection that might be expected from Dr. Kolmer. All methods described were thoroughly tested and found worthy of general adoption. In most instances two methods are recommended. The authors have also aimed to make the technical details clear and simple to suit the needs of the laboratory technician without being burdensome to the clinical pathologist. The contents of this book are therefore "Laboratory methods approved by the American Society of Clinical Pathologists" and should promote a wider application of clinical laboratory science with closer cooperation between practitioner and pathologist in the diagnosis of disease.

The Surgical Clinics of North America. (Issued serially, one number every other month.) Volume 11, No. 3. New York number, June, 1931. 239 pages with 73 illustrations. Per clinic year (February, 1931, to December, 1931), paper, $12.00; cloth $16.00. W. B. Saunders Company, Philadelphia and London, 1931.

This number is noteworthy for the wide range of subjects. It presents some of the outstanding methods of New York surgeons. The chest surgeons will enjoy the work of Lilienthal and there is ample material for the urologists to digest. Some common rectal disorders are treated in a very sane and practical manner by Frankfeldt. The book will be especially valuable to those interested in fractures. There are one hundred and twenty-five pages given over to bone injuries by the New York Fracture Committee of the American College of Surgeons. This one feature should appeal especially to those general practitioners who are desirous of improving their treatment of fractures. Cases of gastric and intestinal ulcers are presented as also are cases of carcinoma and colitis. This number should be of interest to all physicians.

The Surgical Clinics of North America. Volume 11, No. 4 (Mayo Clinic Number—August, 1931). 211 pages with 74 illustrations.

This number, like the New York number, demonstrates some unusual cases and covers sections of the entire body. It teaches the complexities of arriving at a diagnosis, as well as the technic of master surgeons. Balfour presents bleeding ulcer on posterior wall of duodenum; perforating ulcer on posterior wall of stomach; recurring gastro-jejunal ulcer with impending colic fistula; recurring gastro-jejunal ulcer following repair of gastrojejunocolic fistula. Some of the unusual cases presented in this volume are (1) pyoderma of the lower part of the abdomen, vulva, perineum and perianal regions; (2) lipoma of the pharynx containing bone; (3) three cases of epidermoid cyst of the brain and (4) pseudo-duplication of the vermiform appendix. Higgins and Mills present some very interesting "Observations on Drainage of Lymph from the Diaphragmatic Pleura Into the Retroperitoneal Spaces," which article shows the ingenuity of research men in trying to solve their problems. Lundy reports the use of Nembutal in over twenty-three hundred cases

This number will not have the wide appeal of the New York number, but the general surgeon will find much of value in it.

Fractures of the Jaws. By Robert H. Ivy, M.D., D.D.S., F.A.C.S., Professor of Maxillo-Facial Sur-

gery, School of Dentistry, Graduate School of Medicine, and of Clinical Maxillo-Facial Surgery, School of Dentistry, University of Pennsylvania; and Lawrence Curtis, A.B., D.D.S., Assistant Professor of Maxillo-Facial Surgery, Graduate School of Medicine, and School of Dentistry, University of Pennsylvania. 180 pages, with 177 engravings. Cloth. Lea & Febiger, Philadelphia, 1931.

This little book is of interest to the surgeon, dentist and radiologist. The author's experience with fractures of the jaws and the other bones having direct relation with the maxillary regions, is very valuable. He presents the various fractures, and their complications, together with the treatment in a clear cut way. This enables the surgeon to see that they are properly cared for. His methods with the most complicated fractures are much simplified and usually can be applied immediately. This eliminates, to a great extent, time consuming and difficult technical procedures. His x-ray technique is excellent and, if followed, the most obscure fractures will be disclosed. The book is well written, contains numerous useful illustrations, and should be in general use.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

SQUIBB LIQUID PETROLATUM WITH AGAR AND PHENOLPHTHALEIN.—Liquid petrolatum-Squibb, heavy (California), 50cc.; agar, 1.5 Gm.; phenolphthalein, 0.095 Gm. (1½ grains per fluid ounce); sodium benzoate, 0.1 Gm.; acacia, glycerin and water sufficient to make 100 cc. E. R. Squibb & Sons, New York.

SOLUTION LIVER EXTRACT PARENTERAL-LEDERLE.—A sterile aqueous solution of a concentrated water soluble, nitrogenous, nonprotein fraction obtained from fresh mammalian liver. It is marketed in ampules, each containing the material obtained from 100 Gm. of liver. Solution liver extract parenteral-Lederle is proposed for intramuscular or intravenous injection in the treatment of pernicious anemia. Lederle Laboratories, Inc., Pearl River, N. Y. (*Jour. A. M. A.*, October 3, 1931, p. 1077).

SANDOPTAL.—Isobutylallyl barbituric acid. Sandoptal differs from barbital (diethylbarbituric acid) in that both of the ethyl groups of the latter are replaced, one by an iso-butyl group and the other by an allyl group. The actions and uses of sandoptal are the same as those of barbital and its therapeutically useful derivatives. It is also supplied in the form of tablets sandoptal, 0.2 Gm. Sandoz Chemical Works, Inc., New York.

DIPHTHERIA TOXIN FOR THE SCHICK TEST, READY TO USE WITHOUT DILUTION-SQUIBB.—A diphtheria toxin (New and Nonofficial Remedies, 1931, p. 383) obtained by growing diphtheria bacilli in broth, aging, and diluting with peptone solution. It is marketed in packages of 1 cc. containing sufficient for ten tests and in packages of 10 cc. containing sufficient for 100 tests. E. R. Squibb & Sons, New York. (*Jour. A. M. A.*, October 17, 1931, p. 1149).

FOODS

The following products have been accepted by the Committee on Foods of the American Medical Association for inclusion in Accepted Foods:

GOLD MEDAL FLOUR "KITCHEN TESTED" (Associate companies of General Mills, Inc., Minneapolis, Minn.)—A moderately "strong" hard-wheat patent flour designed for general baking purposes in the home. It is claimed to be a good quality "all purpose" flour for use in home baking, standardized in baking characteristics for uniform performance under normal home baking conditions.

GOLD MEDAL FLOUR (Associate companies of General Mills, Inc., Minneapolis, Minn.).—A self-rising flour. A mixture of patent flour (Gold Medal Flour—"Kitchen-tested"), baking powder, containing monocalcium acid phosphate and sodium bicarbonate; and table salt. It is claimed to be especially adapted for cakes, biscuits and pastry flour.

GOLD MEDAL FLOUR "KITCHEN TESTED" PHOSPHATE ADDED (Associate companies of General Mills, Inc., Minneapolis, Minn.)—A moderately "strong" hard-wheat patent flour admixed with 0.5 per cent monocalcium acid phosphate; adapted to requirements of the southern markets. It is claimed to be a good quality flour containing added monocalcium acid phosphate to counteract the addition of excessive quantities of baking soda in biscuit baking and intended especially for southern markets.

WALKER'S BIG DANDY BREAD AND WALKER'S REDI-SLICED BREAD (Walker Bread Company, Fort Worth, Texas).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

CERTIFOODS CERTIFIED NURSERY FOODS — GREEN PEAS (Curtice Brothers Co., Rochester, N. Y.)—Canned sieved green peas. The minimum content of vitamins A, B and C is certified and expressed on the label in vitamin units. No sugar or salt is added. The product is guaranteed to contain not less than 300 units of vitamin A (Sherman method), 5 units of vitamin B (complex) (Sherman and Spohn method) and 3 units of vitamin C (Sherman-LaMer method) per ounce. It is recommended for use in infant feeding and for convalescent and special diets in which a smooth diet is indicated.

CERTIFOODS CERTIFIED NURSERY FOODS — GREEN BEANS (Curtice Brothers Company, Rochester, N. Y.)—Canned sieved green beans. The minimum content of vitamins A, B and C is certified and expressed on the label in vitamin units. No sugar or salt is added. The product is guaranteed to contain not less than 250 units of vitamin A (Sherman method), 3 units of vitamin B (complex) (Sherman and Spohn method), and 2 units of vitamin C (Sherman-LaMer method) per ounce. It is recommended for use in infant feeding and for convalescent and special diets in which a smooth diet is indicated.

JERRY'S KEW-BEE REDI-SLICED BREAD (Jerry's Bakery Company, Terre Haute, Ind.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

DROMEDARY CRANBERRY SAUCE (Strained) (The Hills Brothers Company, New York).—A cooked, sweetened, sieved cranberry sauce. It is claimed to be a cranberry sauce of good quality. (*Jour. A. M. A.*, October 3, 1931, p. 1002).

SIMILAC (M & R Dietetic Laboratories, Inc., Columbus, Ohio).—A spray dried reconstructed diet for infants deprived of breast milk; containing sodium, potassium, and calcium caseinates, lactalbumin, milk sugar, salts, and animal and vegetable fats (butter fat, olive oil, coconut oil, cod liver oil). Similac may be fed either as a complement or as a supplement to breast milk or as a diet where breast milk is entirely absent. It is claimed that the modification of the salts of skimmed milk used in the preparation and manufacture of Similac produces a change in the casein of milk which results in the Similac coagulating in a soft, fine flocculent curd similar to the curd produced when breast milk comes in contact with the gastric juices, thereby enabling the utilization of all food elements contained in Similac.

SWIFT'S PURE TOMATO JUICE (Swift and Company, Packers, Chicago, Ill.).—A pasteurized tomato juice, seasoned with salt. This tomato juice is claimed to be adaptable as an infant food and to be a good source of mineral salts and of vitamins A, B and C. It is also claimed to be a protective food for babies against scurvy.

ROTH'S BAMBY BREAD (The A. Roth Baking Company, Inc., Newport, Ky.)—A white bread made by the sponge dough method. It is claimed to be a bread of good quality. (*Jour. A. M. A.*, October 17, 1931, p. 1150).

DROMEDARY FRESH KEEPING COCOANUT (The Hills Brothers Company, New York).—A moist shredded coconut mixed with sucrose, glycerin and salt. It is claimed to be a coconut food of good quality.

PABST-ETT (Pabst Corporation, Milwaukee, Wis.).—A "process American cheese" containing disodium and trisodium phosphates as emulsifiers, with added salt, whole milk and concentrated milk whey. The product is claimed to contain approximately 280 Sherman vitamin A units per ounce, 46 Sherman-Spohn vitamin B (complex) units per ounce, and determinable amounts of vitamin D. It is recommended for all the uses of ordinary cheese.

KELLOGG'S CORN FLAKES (Kellogg Company, Battle Creek, Mich.).—A cooked and toasted corn flakes cereal flavored with malt extract, sugar and salt. This product is claimed to be a good quality of corn flakes, easily digested and to supply the body with heat and energy.

SWAN'S SLICED BREAD (Swan Brothers, Inc., Knoxville, Tenn.).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality. (*Jour. A. M. A.*, October 24, 1931, p. 1227).

MEAD'S DEXTRI-MALTOSE NO. 1 WITH SODIUM CHLORIDE 2% (Mead Johnson and Company, Evansville, Ind.).—Essentially a mixture of maltose and dextrins with 2 per cent added sodium chloride. Mead's Dextri-Maltose No. 1 with Sodium Chloride 2% is recommended for use as a carbohydrate supplement in the general diet of infants and is especially adapted to meet the carbohydrate requirements of infants and invalids. It is used in milk modifications suitable for children or adult invalids.

MEAD'S DEXTRI-MALTOSE NO. 2 (Mead Johnson and Company, Evansville, Ind.).—Essentially a mixture of maltose and dextrins. This product is claimed to be especially prepared for use as a carbohydrate supplement in general infant feeding and as a valuable ingredient in the diet of adult invalids; it is used where the addition of salt is not required.

MEAD'S DEXTRI-MALTOSE NO. 3 WITH POTASSIUM BICARBONATE 3% (Mead Johnson and Company, Evansville, Ind.).—Essentially a mixture of maltose and dextrins with 3 per cent added potassium bicarbonate. Mead's Dextri-Maltose No. 3 with Potassium Bicarbonate 3% is recommended for use as a carbohydrate supplement in special infant diets and other special diet mixtures for meeting carbohydrate requirements. It is used in milk modifications suitable for children or adult invalids.

CROSBY'S BEST FLOUR (Associate companies of General Mills, Inc., Minneapolis, Minn.).—A hard winter wheat patent flour designed for commercial bakers' use; packed in sacks. It is claimed to be a good quality hard winter wheat patent flour designed to meet the requirements of the baking industry for an economical bread flour.

BORCHERDT'S MALT SUGAR (Borcherdt Malt Extract Company, Chicago).—The product is essentially maltose (87 per cent) obtained by conversion of starch by malt diastase, contains dextrins, proteins, mineral salts, and vitamins B and G. The product is recommended for infant feeding and is claimed to contain vitamins B and G in substantial quantities.

PABST-ETT (Brick Variety) (Pabst Corporation, Milwaukee, Wis.).—A blend of process brick and process American cheese containing disodium and trisodium phosphates as emulsifiers, salt and concentrated milk whey. The product is claimed to contain approximately 280 Sherman vitamin A units per ounce, 46 Sherman-Spohn vitamin B (complex) units per ounce, and determinable amounts of vitamin D. It is recommended for all the uses of ordinary cheese.

LAUB'S QUALITY BREAD (The Jacob Laub Baking Company, Cleveland, Ohio).—A white bread made by the sponge dough method. It is claimed to be a bread of good quality.

WHOLE WHEAT FLAKES—WHEATIES—WITH ALL THE BRAN (Gold Medal Foods, Inc., a wholly owned subsidiary of General Mills, Inc., Minneapolis, Minn.).—Toasted whole wheat flakes prepared from cooked wheat with added sucrose, salt and malt syrup. The product is claimed to be a good quality cooked and toasted whole wheat flakes.

MERRELL-SOULE POWDERED LEMON JUICE AND CORN SYRUP (Borden Sales Company, Inc., New York).—A spray-dried mixture of lemon juice and corn syrup. It is claimed to be a good quality powdered lemon juice with corn syrup recommended for the preparation of lemon pies, beverages, and other lemon food preparations. (*Jour. A. M. A.*, October 31, 1931, p. 1302).

PROPAGANDA FOR REFORM

PANTOPON-ROCHE OMITTED FROM N. N. R.—Pantopon-Roche (Pantopium Hydrochloricum), marketed by Hoffman-La Roche, Inc., is a mixture of the hydrochlorides of the alkaloids of opium containing 50 per cent of anhydrous morphine hydrochloride. The Council on Pharmacy and Chemistry reports that it was accepted for New and Nonofficial Remedies in 1915 and that, in accepting the product and repeatedly thereafter, the Council has insisted that the firm avoid in its advertising any claim that Pantopon-Roche is possessed of essential properties lacking in morphine. The Council was obliged, however, to remind the firm that its advertising should not contain this claim either directly or by inference; and the firm repeatedly signified willingness to abide by this condition. Recently a circular letter of Hoffmann-La Roche, Inc., was forwarded to the Council by a physician. The intent of this letter to indicate that the action of Pantopon-Roche is essentially different from that of morphine was plain. Furthermore, the letter failed to apprise the physician of the identity of the product, namely, that it is a mixture of the hydrochlorides of opium alkaloids. The Council concluded that Hoffmann-La Roche, Inc., could not be depended on to market Pantopon-Roche with claims which make it acceptable for New and Nonofficial Remedies and therefore rescinded the acceptance of the product. (*Jour. A. M. A.*, October 3, 1931, p. 1001).

PERNOCTON NOT ACCEPTABLE FOR N. N. R.—Pernocton, stated to be a 10 per cent solution of the sodium salt of the secondary butyl-beta-bromallyl barbituric acid, was submitted to the Council on Pharmacy and Chemistry by Riedel-de Haen, Inc. The product is proposed for intravenous injection for production of "Pernocton sleep." Since the name is therapeutically suggestive, the firm proposed to replace it with "Pernoston" and requested consideration of the product under the latter name; however, advertising as late as May, 1931, still bears the name Pernocton. The Council on Pharmacy and Chemistry declared the name Pernocton therapeutically suggestive and held the product, whether marketed as Pernocton or Pernoston, unacceptable for New and Nonofficial Remedies for lack of critical evidence that routine intravenous injection of potent narcotics is desirable or safe. (*Jour. A. M. A.*, October 3, 1931, p. 1001).

THE A. M. A. CHEMICAL LABORATORY.—The A. M. A. Chemical Laboratory cannot analyze specimens for individuals. 1. The chemical work undertaken by the Laboratory must be of *general* interest to physicians. 2. The Laboratory is busily engaged in the work for which it was founded, namely, investigations of the newer remedies for the Council on Pharmacy and Chemistry. 3. The Laboratory undertakes examination only of products in original containers, bearing original labels and the source of which can be vouched for in case of possible court action. 4. The present Laboratory would need much enlargement and a far larger staff to examine specimens for all of the one hundred thousand physicians it is designed to serve. (*Jour. A. M. A.*, October 3 1931, p. 1001).

FOODS AND FOOD ADVERTISING.—Today, advertising of foods, separate from the package container, is not controlled by any food statutes, and indeed is quite free of any efficient control. The writer of advertising food products, aside from such limited knowledge of foods and nutrition as he may possess, has only a versatile vocabulary and his conscience as guides in dramatizing the virtues of the products he proclaims to the public. Under these conditions, advertising for food products began to approach the tales of Hans Christian Andersen and the brothers Grimm. Into this mass of mingled truth and deception entered the Committee on Foods of the American Medical Association. It is not surprising that its initial steps should have been greeted with apprehension and bitter deprecation by some of the organs of the food industry, of business and of advertising. The Committee on Foods was established to protect the readers of the journals published by the American Medical Association against improper claims made for foods. If the medical profession required such protection, how much more was the protection necessary for the average layman to whom the same claims were made as were made to physicians. Only those who have been actively associated with the Committee on Foods can realize the vast amount of good already accomplished. (*Jour. A. M. A.*, October 3, 1931, p. 1004).

MISBRANDED "PATENT MEDICINES".—The following products have been the subject of prosecution by the Food and Drugs Administration of the United States Department of Agriculture: Red Cross Chill and Fever Tonic (Cash Bros. Drug Co., Inc.), consisting essentially of quinine sulphate, iron (ferric) chloride, epsom salt, and a small amount of hydrochloric acid. Vindor Diabetic Wine (Zarol Medical Research, Inc), consisting essentially of extracts of plant drugs, including cinchona, a phosphorus compound, alcohol and water. Pinoleum (Llompart Bros. Co.), consisting essentially of mineral oil containing small amounts of camphor, menthol and pine, eucalyptus and cassia oils. Laxative Cold and Grippe Tablets (Parke, Davis & Co.), consisting essentially of acetanilid, cinchonidine and a laxative plant drug. Lax Cold Grippe Tablets (Strong-Cobb & Co.), consisiting essentially of acetanilid, cinchonidine and a laxative plant drug. Chill-Check (Bedsole-Colvin-O'Dell Drug Co.), consisting essentially of epsom salt, iron chloride, quinine sulphate, and water. Stopkofin (Piuma Italian Pharmacy), consisting essentially of ammonium chloride, ammonium carbonate, potassium iodide, antimony and potassium tartrate, extracts of plant drugs including podophyllum, a trace of chloroform, alcohol, sugar and water. (*Jour. A. M. A.*, October 3, 1931, p. 1019).

LACTO-KELPOL NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Lacto-Kelpol is the proprietary name under which the Kelp-Ol Laboratories, Inc., submitted a preparation stated to consist of lactic acid, agaragar, mineral oil, sodium benzoate, water and flavoring. The chief claim for this product was that it is prepared by a special process whereby the lactic acid is "locked up with the agar so that it is unaffected by the gastric juice." The Council declared the product unacceptable for New and Nonofficial Remedies because there was no satisfactory evidence for the claim that the lactic acid contained in Lacto-Kelpol emulsion behaves essentially differently from a dilute solution of lactic acid. When the Council's report was submitted to the Kelp-Ol Laboratories, postponement was requested in order that further evidence might be submitted. The firm submitted further evidence, but this evidence did not permit acceptance by the Council of the statement that the behavior of Lacto-Kelpol in the human intestine is essentially different from that of a dilute solution of lactic acid, and accordingly the Council confirmed its decision declaring Lacto-Kelpol unacceptable for New and Nonofficial Remedies. (*Jour. A. M. A.*, October 10, 1931, p. 1077).

IS MANGANESE AN ESSENTIAL ELEMENT?—Considerable has been written of late about the possible role of copper as a "promoter" of hemoglobin formation in certain types of anemia. It appears to act as a supplement to iron in this process. A similar function has been attributed to other elements, notably manganese, though the claims are still stoutly denied by the majority of investigators. Manganese is constantly present in animal tissues and this has led to the assumption that it is likely to promote some useful purpose. Experiments have been reported in which the addition of traces of manganese to a diet of whole cow's milk supplemented with iron and copper has a favorable effect on the growth of mice and that without manganese they failed to ovulate properly. The latter was true also for female rats. These experiments indicate that manganese may be closely connected with the reproductive organs. Other investigators also insist that manganese does not take part in blood regeneration, but that the element aids in rendering a diet complete for the support of reproduction and suckling of young. (*Jour. A. M. A.*, October 10, 1931, p. 1078).

DONHIDE—ANOTHER NOSTRUM FOR EPILEPSY.—Numerous attempts to relieve epilepsy have resulted in the development of certain well known drugs of a sedative character which control the attacks to some extent but do not constitute a "cure." The Bureau of Investigation of the American Medical Association has a pamphlet which lists a considerable number of preparations purveyed directly to the public with unwarranted claims as to their merit in this disease. Practically all these preparations in the past have been found to contain bromides or phenobarbital (luminal) as their potent ingredient. The most recent addition to this class of preparations is "Donhide", said to be made by the Riverside Laboratories, New York. The advertising is unusually insidious—even governors of states have been urged to use the preparation in state institutions. When the purveyor of the nostrum was informed that the statement of composition of Donhide, namely, sodium bromide, ammonium bromide, scutellaria, cinchona, glycerin and aqua distallata—was unquantitative and therefore of little value, and that there was no reason to believe that this medicament could do anything that any other mixture of bromide could not do, the firm replied that it acted solely in the capacity of sales and distributing agent and that the manufacturer is the Riverside Laboratories, and that because of the information received the composition had been modified; it also offered to find a new name and objected to the charge that the claims were not warranted. Subsequently a statement was received from the Manhasset Chemical Co., Inc., stating that the sale and promotion of Donhide had been discontinued. (*Jour. A. M. A.*, October 10, 1931, p. 1079).

SOLUTION NORMET NOT ACCEPTABLE FOR N. N. R.—Solution Normet Medical and Solution Normet Surgical are marketed in the United States by The High Chemical Co., Philadelphia. According to the advertising, the "Medical" differs from the "Surgical" solution in that it contains less manganese. The Council on Pharmacy and Chemistry reports that no quantitative composition is given in the available advertising or on the trade package examined, but that such a statement is contained in an article which has been published by Normet in a French journal. According to this the preparation contains stated amounts of sodium citrate, calcium citrate, magnesium citrate, iron and ammonium citrate, manganese citrate dissolved in distilled water. The Council reports that the available literature indicates that none of the constituents of Normet's Solution, nor all of them combined, are capable of exerting any extraordinary restorative value in any of the conditions enumerated; but that it is true that the infusion of physiologic solution of sodium chloride alone often causes marked improvement after the loss of blood, though there is no striking difference between the death rate in dogs that have received physiologic solution of sodium chloride and those that have not, following severe hemorrhage. The Council declared Normet's Solution unacceptable for New and Nonofficial Remedies because it is an unscientific mixture marketed

with unwarranted therapeutic claims. *(Jour. A. M. A.,* October 17, 1931, p. 1149).

PLAGIARISM IN "PATENT MEDICINES."—Analysis in the A. M. A. Chemical Laboratory of asthma remedies revealed 81 per cent to contain iodid; 37 per cent contained arsenic; 31 per cent contained both arsenic and iodide and 12 per cent contained acetyl salicylic acid. Patent medicines of this type are seldom original. *(Jour. A. M. A.,* October 17, 1931, p. 1151).

OVESTRUMON NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that under the proprietary name "Ovestrumon", the Vitalait Laboratory of California, Ltd., markets an ovarian extract preparation. After consideration of the information submitted by the manufacturer and of two consultant's reports the Council found the product unacceptable for New and Nonofficial Remedies. When the report was sent to the Vitalait Laboratory of California, Ltd., the firm requested the Council to withhold publication of its report until clinical trials that were under way might be completed and in the meantime agreed to discontinue active propaganda. Although ten months have elapsed since the Council's report was submitted to the proprietors, no acceptable evidence for the efficacy of the product has become available. Hence the Council authorized publication of its report declaring Ovestrumon unaccetpable for New and Nonofficial Remedies because it is a preparation of indefinite composition which is marketed with unestablished and therefore unwarranted therapeutic claims and which does not present sufficient originality to be entitled to a proprietary name. *(Jour. A. M. A.,* October 24, 1931, p. 1226).

THE COST OF PROPRIETARY AND NONPROPRIETARY DRUGS.—A comparison of the prices of drugs sold respectively under protected and nonprotected names shows that the cost of the former is far in excess of the price for which the latter are sold. A comparison of the wholesale price of proprietaries compared with the cost of the drugs sold under their nonproprietary name shows that the total cost of one ounce each of these under a protected name is $25.30 while the cost of an ounce each under an unprotected name is but $6.40. The cost of the proprietary name to the consumer is $18.90. *(Jour. A. M. A.,* October 24, 1931, p. 1226).

IS VITAMIN A AN ANTI-INFECTIVE AGENT?—The significance of vitamin A as an essential of human nutrition can no longer be questioned. Until recently, physiologists have been engrossed with the consideration of the more obvious manifestations of deficiency disorders. The gross lesions of scurvy, pellagra, rickets and other results of dietary defects have received foremost consideration. When mastoid and nasal sinusitis, purulent otitis media, and ocular, respiratory and alimentary tract infections were found to occur in laboratory animals deprived of vitamin A, the problem of "lowered resistance" naturally presented itself. Recent investigation has suggested that infection may follow the weakening of the tissues, and that it may be due to the breakdown of the local tissue defenses. This has raised the question as to whether it is proper to refer to vitamin A as an "anti-infective" agent. Rats inoculated with virulent bacteria and kept on a vitamin A-free diet showed markedly decreased resistance to infection as compared with controls receiving cod liver oil. No such susceptibility to similar inocculations was found in rats on a diet deficient in vitamin D, compared to controls protected by viosterol. Increased susceptibility to infection is apparently an early manifestation of a dietary low in vitamin A. There has been a lack of evidence that vitamin A can cure infections when the barrier of the mucous membranes has been passed or that it can prevent or cure infections that enter the blood stream. The newer studies pave the way for the possibility, however, that vitamin A may after all do more than maintain the physiologic defenses of the mucous membranes. *(Jour. A. M. A.,* October 24, 1931, p. 1229).

THE ABSORPTION OF LEVULOSE.—Various investigators have asserted that levulose is particularly valuable in the dietary of patients with diabetes. Perhaps the most enthusiastic report, among the conflicting statements, is that of Joslin who is inclined to believe that levulose can be used with advantage in the diabetic diet in small amounts daily for intermittent periods. Levulose seems to cause a different type of metabolism from dextrose, possibly because of the conversion of levulose in part into fat in diabetes or to a more active stimulation of the production of insulin. A recent investigation has shown that levulose is not changed to dextrose in the intestines. Whatever transformations occur take place beyond the seat of absorption. *(Jour. A .M. A.,* October 24, 1931, p. 1230).

MISBRANDED "PATENT MEDICINES."—The following products have been the subject of prosecution by the Food and Drug Administration of the U. S. Department of Agriculture: Anti-Phymin (R. E. MacIntire and Co.), consisting of sulphur dioxide and water (an analysis by the A. M. A. Chemical Laboratory made in 1925 showed that this product belonged to the same class as "Liquozone", "Radam's Microbe Killer", "Septicide", etc. "Anti-Phymin" is now known as "Medicinal Gas"). Stanback Headache Powders (Stanback Medicine Co.), containing acetanilid, aspirin, and potassium bromide and caffeine. All Healing Ointment (Manhattan Drug Co.), having a lanolin base together with zinc oxide, boric acid, carbolic acid, sulphur, menthol and thymol. Bromalina (sold in Porto Rico), consisting essentially of creosote, a trace of bromoform, sugar, alcohol and water, flavored with oil of wintergreen. B-C for Headache and Neuralgia (B-C Remedy Co.), powder containing aspirin, acetanilid, and potassium bromide. Rocky Mountain Cough and Catarrh Root (Colorado Cough and Catarrh Root Co.), found to be the dried rhizomes and roots of a species of angelica. Larkin Cold and Grippe Tablets (Larkin Co., Inc.), tablets containing acetanilid, quinine hydrobromide, monobromated camphor, caffeine and aloin. Watkins Menthol-Camphor Ointment (J. R. Watkins Co.), essentially petrolatum containing camphor and menthol. Neuraline Tablets (Eureka Medical Co.), tablets containing acetanilid and milk sugar. Baker's Laxative Cold and Grippe Tablets (Manhattan Drug Co.), tablets containing acetanilid, aloes and traces of cinchonine and red pepper. *(Jour. A. M. A.,* October 24, 1931, p. 1243).

ALQUA WATER, CALSO WATER, AND ALKA WATER NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Alqua Water (Shasta Water Co., San Francisco, Shasta Springs and Los Angeles, Calif.) and Calso Water (The Calso Co., San Francisco and Los Angeles, Calif.) are advertised as waters of which the alkaline content has been increased by the addition of unspecified amounts of various salts. The advertising for both waters recommend them for use in combating acidosis. These two products can accomplish no more than a little sodium bicarbonate in water obtainable at any home at much less cost. The label of Alka Water (Carl H. Schultz Co., Brooklyn, N. Y.) gives a nonquantitative statement of composition. However, in an advertising circular a quantitative statement of composition is furnished. Under the caption "What it is and What it Does" the circular follows the specious old custom of the vendors of shotgun preparations by listing the virtues of each of the components of this complex mixture, leaving the uncritical reader to the assumption that the product has the virtues of each of the constituents. The claims advanced for the lithium components are a revival of the old fallacy that lithium salts are solvents for uric acid in the system. The Council declared Alqua Water, Calso Water and Alka Water unacceptable because they are irrational proprietary mixtures, marketed with unwarranted and misleading therapeutic claims. *(Jour. A. M. A.,* October 31, 1931, p. 1301).

ABSTRACTS

THE PHYSICIAN AS A HEALTH WORKER

According to L. O. GEIB and HENRY F. VAUGHAN, Detroit *(Journal A. M. A.,* Aug. 8, 1931), the health department inaugurated in Detroit in 1928 a program of participation by the general medical practitioner in official public health procedure the ultimate objective of which was to secure the sympathetic and wholehearted support of the medical profession in order that the general practitioner might not only practice curative medicine but actively take his part and share his responsibility in the preventive medical program. A campaign to secure protection against diphtheria, for young children, more especially the preschool child, was used to interest and stimulate response from the general practitioner. The program has (1) secured the protection of seventy percent of preschool children and eighty percent of school children against diphtheria, without the use of free clinics; (2) reduced the diphtheria rate to one-fourth of the level existing prior to the beginning of the campaign; (3) provided for postgraduate conferences on communicable disease control; (4) completely changed the attitude of the medical profession toward the work of the health department and, more especially, eliminated the antagonistic feeling that has frequently existed toward the work of the public health nurse; (5) stimulated parental responsibility for the care of the child; (6) provided compensation to physicians for service rendered to the indigent; (7) actually served as a beginning to make a health center of the office of each physician, and (8) afforded an opportunity to expand the program of health conservation with medical cooperation into other fields, such as tuberculosis and cancer control, periodic physical examinations, and the health of mothers and infants.

ROLE OF COMMUNITY CLINICS IN MENTAL HYGIENE

According to George S. Stevenson, New York *(Journal A. M. A.,* March 28, 1931), the mental hygienist in developing his preventive and early treatment program is confronted with a more complex situation than the physical hygienist in that his subject, man-as-a-whole as contrasted to his parts, is a freely moving agent which is constantly changing its relationships and inducing responses from people on a variety of grounds. Prevention in mental hygiene work hence has been sought not only in medicine but also in criminology, social service, pedagogy and religion, and a successful community effort must coordinate these varied approaches. Mental hygiene consequently depends on the willingness and capacity for cooperation of a number of co-equal groups, no one of which can assume too much authority. This entails an extensive improvement in professional education so that the teacher will teach better, the social worker and public health nurse will do their jobs better, the judge will plan better for his cases, the minister will guide better, and the physician will see his problems with their broader implications. This last means a new shading, not an added subject to medical education. The mental health activities of a community cannot get ahead of these advances in professional training. The clinic can provide service to the few cases whose mental hygiene needs exceed the capacities of other agencies in the community; it can should the jobs of others only temporarily and pending the development of these capacities. Beyond clinical service, it carries a responsibility for community education and organization. The mental hygiene of a community is a compound whole community job in which the clinic provides leadership and a limited specialized service.

LOOKING FORWARD IN PEDIATRICS

C. ANDERSON ALDRICH, Winnetka, Illinois *(Journal A. M. A.,* Aug. 8, 1931), believes that there is still much ahead for the physician interested in children. In view of the pressing nature of many of the problems, the question arises as to how to speed up the work, as to the mechanism of progress. True progress is quickly attainable only through the close cooperation of two indispensable factions, which are often found too antagonistic, the conservatives and the progressives. The progressive turn of mind is continually objecting to the prescribed order and darting out into the unknown in an effort to find new truths. Without the progressive thinker, nothing new is achieved. The conservative tends to be satisfied with consolidating the known facts and applying them. The progressive represents the active, seeking force; the conservative, the passive, judicial weight. The progressive makes many mistakes in consummating his brilliant discoveries. The conservative exerts his power in counteracting these mistakes or false starts, though he may himself make serious errors in estimating the value of new concepts. True progress can be extremely rapid when these two factions are in close accord, when the progressive thinker has the advantage of conservative judgment, and when the conservative is stimulated by the challenge of new ideas. Progress is inevitably delayed when the progressive looks on the conservative as an old fogy or when the conservative deprecates the enthusiastic sallies of the progressive. Mutual understanding between the two factions is a stimulating and indispensable force in the attainment of new truths. The author's purpose in mentioning this is to point out that at the present time pediatrics is amply supplied with both types of minds. It has always had the progressives, else the group would never have started, and time has developed the conservatives. Through their cooperation the next decade should furnish noteworthy advances. Neither numbers nor brains are lacking, and the will to learn

LOCAL ANESTHESIA IN REDUCTION OF FRACTURES

According to R. G. CAROTHERS, Cincinnati *(Journal A. M. A.,* Aug. 22, 1931), it has been found that if a solution of one or two percent procaine hydrochloride is injected into the hematoma, which is present in the majority of fresh fractures, the lacerated tissues, both bone tissue and others, will be bathed with procaine, eliminating pain. Pain having been eliminated, muscle spasm disappears and the manipulation for reduction of the fracture becomes not only painless but relatively simple. Criticism of the method has been offered on the ground that introducing a needle through the skin and into the hematoma is, in theory at least, converting a simple fracture into a compound one. Further than this, the introduction of foreign material into the fracture area is deplored as non-surgical. The author's experience, which covers 270 cases, has not led him to fear infection. He has had no infections in simple fractures and the infections in his compound fractures have been no more severe and no more frequent than under other methods of anesthesia. For two years now it has been his method of choice, and he has used it in almost all fractures of the long bones. He has not tried to use this method in fractures of the spine, ribs or pelvis or the bones of the head. Occasionally one runs into a fracture so thoroughly impacted that there is no hematoma around it, and these cases present an entirely different problem. In all other fractures of the upper and lower extremities that he has encountered in the past two years he has used this method, except for an occasional case in which spinal anesthesia was used and two cases in which the patient refused to have this method applied. After the roentgenograms have been made, the surgeon decides just where he had best introduce the needle and, at this point, paints with iodine an area about eighteen millimeters in diameter. With a fine needle a small wheal is made with procaine and a larger needle with a fairly heavy shaft of the necessary length is then applied to the syringe. The author always uses a twenty cubic centimeter Luer syringe. The needle is introduced toward the fracture, and the surgeon then feels around until he can easily withdraw blood into the syringe. He then introduces from ten to twenty cubic centimeters of a two-percent solution of procaine, the amount depending on the age of the patient and the size of the limb. If more than one fracture is present, each

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ABSTRACTS

(Continued from page 696)

one is so anesthetized. After a five-minute interval the patient is ready for manipulation. No preliminary preparations are required, and a skilled assistant is not necessary. The patient can be, and usually is, quite cooperative and as soon as the fracture has been splinted, the patient can be taken for a roentgen check-up at once. If it is discovered that the reduction is not satisfactory, it can be done over again without further anesthetic, for the procaine remains effective for about an hour and a half. One should not finish with the anesthetic until one is sure, by means of a roentgen check-up, that the reduction is satisfactory. To check up with films is time consuming and, with a general anesthesia, difficult, but films are so much more satisfactory than the fluoroscope that local anesthesia offers a decided advantage in this respect. The author now had 270 cases to report in which he has used this method. In 250, or 92.6 percent of these cases, the anesthetic has been absolutely satisfactory in every way. Most of the patients were not given a preoperative narcotic or sedative, except a few who received moderate doses of morphine. The vast majority had not even this. In eighteen, or 6 2/3 percent of the cases, the anesthetic was good, and he was able to proceed with a satisfactory reduction. Some of these eighteen patients complained of a little pain, and in some there was a slight amount of muscle spasm. Two of these patients had mild procaine shock. In none of the cases did the author encounter infection that could in any way be attributed to the anesthetic. In only two cases of the 270 did he find it necessary to resort to another type of anesthesia. One of these was an ankle fracture with complete dislocation of the astragalus, backward and upward, and the other was a case of a fractured femur in which he believes that he got the procaine into a vein rather than into the hematoma of the fracture. This method also has been employed by house surgeons at the Cincinnati General and the Good Samaritan hospitals in well over 500 cases, with such excellent results that it has been made their method of choice.

WORK OF COMMITTEE ON FOODS OF AMERICAN MEDICAL ASSOCIATION

MORRIS FISHBEIN, Chicago (*Journal A. M. A.*, July 11, 1931), states that notwithstanding the lack of exact information on which to make definite claims for various natural as well as synthetic food products, both the medical profession and the public have been deluged with screaming announcements concerning the health-giving qualities of such preparations. Foods are sold as health foods, as tonic foods and as vitalizing foods. This was the situation that caused the Council on Pharmacy and Chemistry to ask of the Board of Trustees the permission to appoint a Committee on Foods, which should serve in relationship to food products in the same way that the Council on Pharmacy and Chemistry concerned itself with drug products. In order to pass on a food product, the Committee requires a certain amount of information which permits of a scientific judgment. It asks for the nature and proportions of the raw materials used, the method of manufacture, the chemical composition, the caloric value, evidence in support of sanitary and hygienic conditions of preparation, bacterial cleanliness as shown by absence of pathogenic germs, vitamin content and claims used in promotion. It has been necessary to demand extensive information as to the raw materials used, because it is well established that the soil and conditions of growth, time of harvest, handling and treatment after harvesting, duration, conditions and methods of storage, and method of manufacture may influence greatly various food values. Certain processes of manufacture destroy vitamins, whereas others tend to preserve the vitamin content. The composition of the finished product is necessary because of the great interest now attaching to specific food sensitivities and to the needs in deficient diets for various types of protein or mineral salt. The claims made in the promotion of any food product can obviously be judged by the facts determined relative to its raw materials and its process of manufacture. In order that it may be constantly aware of changes made in advertising claims, the Committee asks the manufacturer to submit all his advertising at regular intervals and, in addition, to submit any new claims that may be offered from time to time. In order that manufacturers may be induced to submit their products to the Committee and to cooperate with the Committee in its work, certain rewards are offered. The products not accepted by the Committee will not be permitted to be advertised in any of our publications. The manufacturer who complies with the rules of the Committee is entitled to note "accepted by the Committee" in advertising material and also to place a seal granted by the Committee on each package of the product and in such advertising matter as may be issued. Furthermore, notices of acceptances are regularly published in *The Journal of the American Medical Association* and the complete descriptions will eventually be accumulated in a book to be called "Accepted Foods," and will be issued regularly as the book New and Nonofficial Remedies is now issued by the Council on Pharmacy and Chemistry. Furthermore, this book is to contain a chapter describing foods of various classification, qualification and food value, and the claims that may be made for them. Thus far the Committee on Foods has not published a rejection of any product. The reason for this absence of rejections is the fact that practically every manufacturer thus far concerned with the work of the Committee has voluntarily modified his claims or his advertising campaign in order to meet the demands of the Committee. The situation is, therefore, one on which the public may be congratulated. Manufacturers and purveyors of food realize that a derogatory report concerning a food product is practically fatal to its sale and advancement. Furthermore, the manufacturers and purveyors of food have apparently an ethical point of view as high as that of any professional group in the country. It is only the manufacturer of a specialty on the borderline between the food and drug field, whose existence depends on the promotion of a single food, who hesitates in modifying the claims that are made. Certain products have reached the point at which the Committee finds it necessary to publish statements of rejection and such statements will, no doubt, appear in the near future. The Committee on Foods was created by the Council on Pharmacy and Chemistry to prevent or discourage unwarranted, incorrect or false advertising claims in the promotion of food products and thus to protect the public and the medical profession against deception by untruthful or fraudulent health, nutritional or other advertising claims for food. It is recognized that the advertising of foods is a regular practice of food merchandising and that truthful food advertising is attractive to the public. It provides them with statements concerning food values and proper nutrition, and aids in the dissemination of much helpful information. Incorrect or fraudulent food advertising, on the other hand, in proportion to its degree of incorrectness and falsity, is capable of working harm in matters of health. The Committee feels that it has made a notable beginning in its work. It anticipates increasing interest and influence for the future, dependent on the extent to which the medical profession and the public support the work of the Committee.

An art critic, speaking of the virtues of this painting and the faults of that one, finally came to a picture in the gallery and said: "Now, you see in this picture the artist has not learned his trade—it lacks technique and understanding. His trees seem to have no form; they do not stand up; the grass has no roots. His clouds look like bits of paper stuck on the canvas. And here you see he has resorted to a trick to catch the public eye and has attempted to paint a fly. Now, I would not object to the fly, had he been able to draw better and make it look like a fly. This fly looks like a lump of mud and has not the character of a fly."

At this point the fly, having tired of the critic's rambling, took wing and flew away.

IS BRONCHOSCOPY INDICATED IN TUBERCULOSIS?

Louis H. Clerf, Philadelphia (*Journal A. M. A.*, July 11, 1931), discusses bronchoscopy in pulmonary tuberculosis. The bronchoscopic conditions in tuberculous patients who developed unexplainable signs and symptoms are noted, and though the cause of these could not always be relieved, positive data were secured, which aided in intelligently treating the condition. Patients with obscure chest signs and symptoms were examined bronchoscopically to determine whether tuberculosis was present; others were correctly diagnosed when tuberculosis was unsuspected. The observations are recorded and the general indications for bronchoscopy are considered. The author believes that bronchoscopy is rarely indicated in uncomplicated pulmonary tuberculosis. The chief value of bronchoscopy in tuberculosis is its aid in the diagnosis of unexplainable signs and symptoms. Diagnostic bronchoscopy is indicated in cases presenting obscure pulmonary conditions in which tuberculosis may be suspected but cannot be proved. Absolute contraindications to bronchoscopy are few; in questionable cases the indications must be considered carefully.

ERADICATION OF SYPHILIS AS PRACTICAL PUBLIC HEALTH OBJECTIVE

Thomas Parran, Jr., Albany, New York (*Journal A. M. A.*, July 11, 1931), calls attention to the fact that in New York State during the past year a special health commission has been studying the whole problem of public health and has given particular attention to the possibilities of the control of syphilis. The commission is convinced that the field in which the next great advance in public health needs to be and can be made is the control of syphilis. Briefly, the proposed New York State program for the control of syphilis includes: (1) a state aided and state-wide system of county boards of health under the direction of trained, full-time health officers; (2) a similar, whole-time direction of city health service in the larger cities; (3) the extension of the existing system of approved local laboratories for the diagnosis of venereal and other diseases to cover the areas not now being served intensively by laboratory service; (4) the distribution of the arsphenamines freely to all physicians on the same basis as other biologic products are now distributed; (5) the requirement that every county and city board of health provide facilities for the treatment of the venereal diseases, irrespective of whether the patient actually is infectious or indigent; (6) clinics established by these local boards of health to meet the standards prescribed by the state commissioner of health; (7) clinic directors to have qualifications approved by the state public health council, and (8) educational measures. The author presents evidence that syphilis can be controlled by the better application of known medical and public health methods. The machinery and the program necessary to accomplish this do not involve new and untried procedures, but rather a more universal application of tried procedures. The operation of such a program as outlined will necessitate a considerable but not prohibitive expenditure of money and intensification of intelligent effort, but the results will more than compensate for such effort.



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Physicians' Directory

SURGERY AND GYNECOLOGY

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WYNN S. OWEN, M.D.

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Hours: 11 to 1, or by appointment
Phone: Randolph 5592

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P. E. McCOWN, M.D.

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PHONE 226

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